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Alice R. Hilland. HARPER'S

INTRODUCTORY

GEOGRAPHY

WITH

MAPS AND ILLUSTRATIONS

PREPARED EXPRESSLY FOR THIS WORK

BY EMINENT AMERICAN ARTISTS

NEW YORK
HARPER & BROTHERS
1880



PUBLISHERS' ADVERTISEMENT.

In submitting this work to the public, we beg leave to ask attention to a brief statement of its leading features, confident that they will be found to answer the requirements of the most intelligent and experienced educators:

- 1. It is designed to be an introductory text-book, as its name imports, to prepare young pupils who are beginning the study of geography for the use of a more comprehensive manual. With this aim in view, both the kind of matter selected and the style in which it is presented have been adapted to the age and capacity of those for whom the work Some topics—essential to a manual is intended. for maturer minds, but not suitable to be placed before beginners—have been omitted; and details that would be dry and pointless to such youth have been expressed in suggestive and enlivening These adaptations have been efgeneralizations. fected in conformity to a consistent ideal, so that, while introductory to a larger manual, the work is symmetrical and complete in itself.
- 2. An elementary geography should be as attractive as it is useful; its subject-matter should be presented with the continuity of an engaging narrative, calculated to stimulate curiosity, as well as to inform the mind. This mode of treatment is consistent with the true philosophy of the subject. Accordingly, the descriptive portions of this work have been carefully written in a familiar narrative form, so far as the nature of the topics would allow, and are intended to be read by the pupils.
- 3. The descriptive part of each lesson is followed by questions with appended answers, which extract from the part to be read its important points of information, and present them in a concise-and convenient form for recitation. In the part to be recited the language of the text is preserved as far Thus the advantages of the narraas possible. tive method of instruction are combined with those of the question-and-answer method without any incidental defects. Special attention is solicited to this feature, which, in its fullness and completeness, is believed to be without a parallel in elementary works on geography. Critical observation has clearly proved that young children have not the capacity to disengage the points specially worthy of remembrance from the text of a flowing narrative and put them into affirmative statements for recitation; and many elementary works, in both geography and history, have been failures as text-books because the recitations have been made dependent on a series of questions, the answers to which the pupils have been expected to find out and express for themselves.
- 4. The maps and illustrations are designed not only to adorn, but to elucidate, the text. As to their artistic beauty and excellence, they speak for themselves.

This work and Harper's School Geography together furnish a complete course in physical and political geography for intermediate and grammar schools.

HARPER & BROTHERS.

Franklin Square, New York, March, 1877.

Elice Foi: Hilgard. Berkeley.

SUGGESTIONS TO TEACHERS.

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- 1. An effort has been made to render the various explanations in this book as clear as words can express them. But it is often difficult to picture in words what may readily be made intelligible by means of practical illustrations. The teacher should therefore supplement the text by the use of appropriate objects. For instance, in connection with whatever relates to the earth as a globe—the hemispheres, meridians, parallels, etc.—an artificial globe is a very important means of illustration. If a globe be not at hand, a ball, apple, or orange may be used.
- 2. The first part of each lesson should be carefully read by the class before the part to be recited is studied. At the time of such reading, all unfamiliar words should be explained, and all points capable of objective illustration should be fully illustrated. The mind of the pupil will thus be prepared to grasp and retain the portion to be recited.
- 3. That portion of the text which is of secondary importance, because employed by way of relief or illustration, is taken up among the "Questions for Review," for the purpose of variety, and of allowing the pupil to exercise his powers in drawing directly upon the matter that has been read. In the latter part of the book, the number of questions with appended answers is gradually reduced, while the scope of the review questions is correspondingly enlarged.

- 4. The cities and towns called for by the text are indicated on the maps by a difference of type, and those that are called for by the map questions are still further distinguished by the use of a red circle.
- 5. The questions to be answered from the maps precede the descriptive text, in order that the pupil may be made familiar with the general structure and purposes of the maps, and because some knowledge of the location of places should precede the references to them in the text. The teacher should require the answers to the map questions to be correct in their phraseology as well as in their statement of facts.
- 6. It is a serious question how far answers to questions in a school text-book should be phrased in complete sentences. With primary-school children, this method should never be waived. It is vital to proper training. But there comes a period in a pupil's progress when it not only becomes a monotonous and harassing interruption, but consumes far too much time. Both questions and answers become elliptical of necessity. This period may be assumed to be when the pupil is old enough to study and recite *memoriter* from text-books; and therefore, while care has been taken to make the answers in this book clear and explicit, no attempt has been made to phrase them in complete sentences.

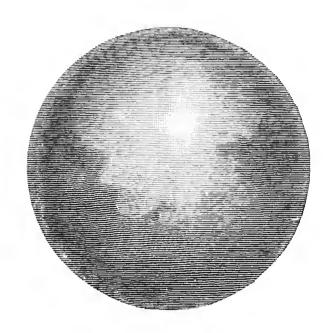
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GEOGRAPHY.



LESSON I. ABOUT THE EARTH.

[To be Read.]

Geography is a description of the surface of the earth, and of its countries and their inhabitants.

The surface of the earth is its outside, and the earth itself is the great ball or globe on the surface of which we live. For, strange as it may seem, we do live on the surface of a great ball. The ground on which we tread, and that we see stretching out on every side,

and holding up the houses and the trees, is not a plain, as it appears to be, but is part of the outside of a ball, which is so large that we can see only a small portion of it at one time. It seems to be flat, because it is so very large. The surface of a small ball, such as you can hold in your hand, is so very rounding everywhere that no part of it would ever be supposed to be flat. But on a ball as large as the earth, the surface that a person can see before the ground and the sky seem to meet does not appear to be rounding at all.

Many years ago, before people knew as much about the earth as they now do, every-

body believed that it was really what it appears to be—a vast plain.

[To be Recited.]

What is geography?

Geography is a description of the surface of the earth, and of its countries and their inhabitants.

What is the earth?

The earth is the ball or globe on the surface of which we live.

Does the ground that we see all around us seem to be part of the surface of a ball?

It does not; it seems to be part of a great plain.

Why does it seem to be part of a plain?

Because the earth is so very large.

LESSON II. MORE ABOUT THE EARTH.

[To be Read.]

If the earth were really a great plain, a person who should travel far enough would, sooner or later, come to the end of it. And the farther he should go, if he travelled in a straight line, the farther he would be from the place from which he started. And he could not again get to the place he started from without turning about and going back.

Now take an apple, or an orange, or any ball you may happen to have, and stick a pin in it, or make a mark on it, no matter where. Hold it in one hand, with the spot you have marked or stuck a pin into uppermost, and place the end of the index or pointing finger of your other hand on the pin or mark.

Then slowly move the finger round the largest part of the fruit or ball. If you move it as directed, it will go completely around

the fruit or ball, and come at length to the very pin or mark it started from. Now, if the pin or mark represented your home, and if the finger were yourself taking a journey, you would reach home without having gone back over any part of your track.

That is because you would have travelled in a circle around a ball; and by no path, except a circular one, can one arrive at the place he started from, and yet seem to be all the time going farther and farther forward.

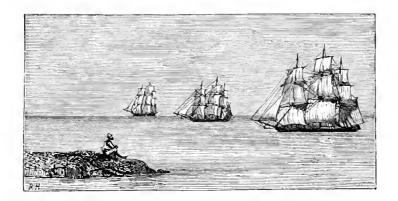


So brave and daring men, many years ago, determined to find out the real form of the earth. They left their homes and travelled on and on, and finally came to the very places they started from, without ever having turned about and gone back. Then thinking people knew that the earth must be a great ball.

There is another proof that the earth is round. It is this:

The ocean, when it is calm, is more nearly level than any thing else on the surface of the earth; and if it were perfectly level, the whole of a ship, when at a distance, would be seen at the same time—masts, sails, and body, or hull—just as it is seen when it is near, except that it would appear much smaller. For you know that any thing looks smaller when at a distance than when it is near. In this

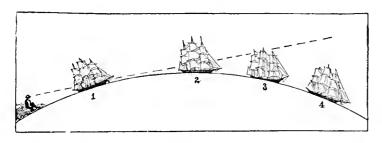
picture, the man on the shore sees every part of the distant ship just as he sees every part of the ship near by, because they are both represented to be sailing on a level.



Now, in reality, the whole of a ship in the distance on the ocean can not be seen, just as it is seen when it is near by. But when it is far off and coming near, the tops of the masts are always seen first, then the sails, and, last of all, the hull, or body. And when it is going out to sea, the hull disappears first, and, last of all, the tops of the masts.

These facts came at last to be carefully noticed and studied. They were found to be always true of ships when coming near or going into the distance, wherever the spectator might be. And as people knew that this could not happen unless the surface of the water was rounding like the outside of a ball, they made up their minds that the earth must be round like a ball.

Here is a picture of the way in which a ship goes out of sight. The man sitting on



the shore can see the whole of the ship when it is at the point marked 1; when it is at the point marked 2, the hull has passed out of sight; when it is at 3, he can see only the

tops of the masts; and when it is at 4, it has disappeared altogether from his view.

[To be Recited.]

How was the real form of the earth found out?

Brave and daring men left their homes, and travelled, without turning about, until they came to the very places they set out from.

What does that prove?

It proves that the earth is round like a ball.

Why does it prove that the earth is round?

Because a circular path is the only one by which one can reach the place he started from, without turning about and going back.

What other proof have we that the earth is round?

When a ship is coming in from sea, the tops of the masts are seen first, then the sails, and then the hull.

Why does that prove that the earth is round?

Because if the surface of the water were flat, the hull would be seen as soon as the masts.

LESSON III.

STILL MORE ABOUT THE EARTH.

[To be Read.]

Boys and girls who live in cities often walk or ride out into places where there are open fields and woods, and only a few houses, and then they say they have been in the country. But that is not the meaning of the word "country" as it is used in geography. There it means one of the divisions into which the land on the surface of the earth is separated, and it almost always means that all the people living in one of these divisions are under the same government; that is, that they have the same laws and the same rulers.

We have thus learned the meaning of the

words "surface, "earth," and "countries;" and now we can understand what is meant when we read that geography is a description of the surface of the earth, and of its countries and their inhabitants. When we have studied this book, we shall understand what is meant by mountains and oceans, and islands and lakes, and seas and rivers. We shall have learned about the productions of the earth: the delicious fruits, the noble trees, and the beautiful flowers; about the hot regions where savage beasts prowl in the tangled forests; about the cold regions where the huge whale lives in the water, and the reindeer speeds over the snow; about the people that live on the earth —white people and black people, and tawny people and copper-colored people; about cities and towns, and ships and railroads, and many other things.

[To be Recited.]

What is the meaning of the word "countries" as used in geography?

It means the divisions into which the land is separated.

What else does it mean?

It almost always means that all the people in one of these divisions live under the same government.

LESSON IV. THE HEMISPHERES.

[To be Read.]

We know how the moon looks when it is called *full* moon. Then it is large and round and very bright, for it is opposite to us as well as opposite to the sun, and we see the entire half of it, as the sun shines full upon it. It has many mountains, chiefly in the parts that look brightest. The dark spots are great plains with some mountains upon them. No ocean is seen upon it.

Now suppose we could go up through the sky far enough to get a good view of the earth with the sun shining full upon it, just as we see the moon when it is called "full moon;" how do you think it would look?

It would look much like this picture:



WESTERN HEMISPHERE.

The dark parts lying in irregular and broken forms near the middle of the picture represent land, and the brighter and smoother parts represent water. We notice that just half of the earth is represented in this picture. We also notice that in this half there is a great deal more water than land.

Now, if we could get a view of the other half when the sun is shining brightly upon it, it would appear somewhat like this:



EASTERN HEMISPHERE

The land in this half is very different in shape from the land in the other half; and there is more of it than there is in the other half. Still, even in this half there is more water than land, and of the surface of the whole earth about one quarter is land and three quarters are water.

We see under the first picture the words "Western Hemisphere," and under the second picture the words "Eastern Hemisphere." These are the names of the pictures; they are very important names in geography, and it is necessary to explain what they mean.

Any thing round like a ball is a globe. Another name for any thing round like a ball is sphere. The word "hemi" means half; and people have taken that word and joined the word sphere to it, thus making a new word—hemisphere, which means half a sphere. And since each of the pictures we have just been looking at represents half of the earth, and since the earth is a sphere, these halves are called hemispheres. One is the "Western Hemisphere;" the other is the "Eastern Hemisphere."

[To be Recited.]

What do the pictures in this lesson represent?
They represent the halves of the earth.

What is the half of the earth in the first picture called? The Western Hemisphere.

What is the half of the earth in the second picture called? The Eastern Hemisphere.

Why are these halves of the earth called hemispheres?

Because the earth is a sphere; and the word "hemi" means half. So half of the earth is a hemisphere.

How much of the earth's surface is land, and how much of it is water?

About one quarter is land, and three quarters are water.

LESSON V. DIVISIONS OF THE LAND.

[To be Read.]

We have seen how the earth would appear if looked at from a distance. We have seen how much land there is, and how much water. We have seen, too, that the land and the water have different divisions and forms.

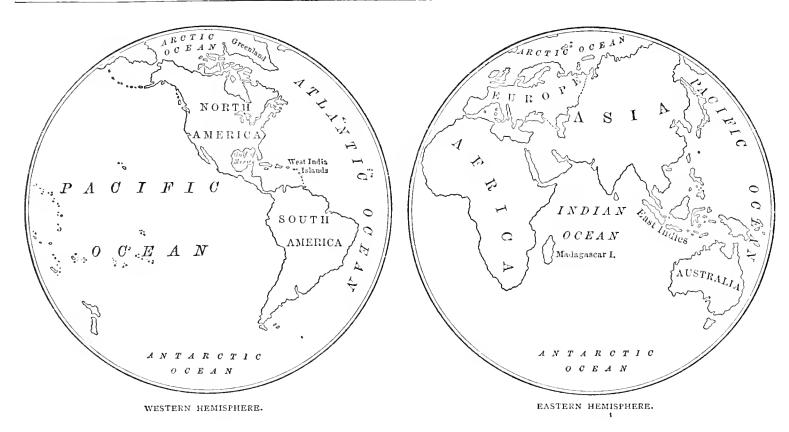
Now we must have names for these different divisions and forms of the land and the water, else we can not point them out and study about them. If we look on the next page, we shall see pictures of the hemispheres, side by side, just like those we saw in the last lesson, except that they contain the names of the divisions of land and water.

We will first learn about the divisions of the land. There are two of these, one called *continents*, the other called *islands*. Large masses or bodies of land are called continents; smaller bodies of land, entirely surrounded by water, are called islands.

Since there are two very large masses of land in the Western Hemisphere, each of them is considered a continent; one is called the continent of North America, the other the continent of South America.

How many continents are there in the Eastern Hemisphere? There are only two very large masses of land, therefore there ought really to be only two continents. But for certain reasons people have chosen to divide the larger of these two masses into two continents. So we have in these two masses three continents—Europe, Asia, and Africa.

There is also one other mass of land large enough to be called a continent. It is in the Eastern Hemisphere, and its name is Australia. Thus we find that there are in all six continents — North America, South America, Europe, Asia, Africa, and Australia.



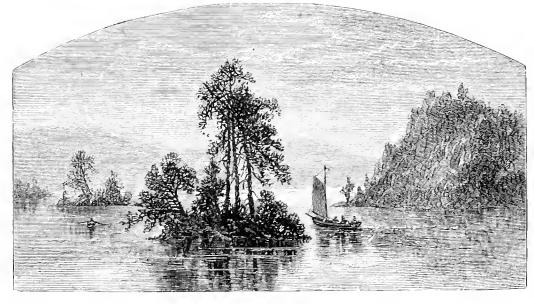
Here and there, near the borders of the continents, and sometimes far out in the ocean, are small bodies of land wholly surrounded by water. These are islands.

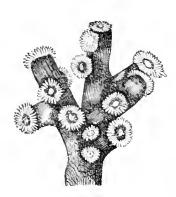
There are a great many kinds of islands, large and small, level and mountainous; and there is one kind, beautiful with trees and fruits and flowers, and perhaps having many inhabitants, which was built by little animals.

Everywhere in the warm parts of the oceans a strange little animal lives, called the coral animal, or polyp. It is at first like a tiny drop of jelly no bigger than the head of a pin; and wherever the water is not very deep millions of them fasten themselves to the rocks at the bottom. After a while a stony substance forms in the body of each polyp, just as the shell forms around an oyster; and when the polyp dies, the stony substance remains. But before it dies, other little jelly-like polyps have sprouted out from it, much as buds shoot out from a plant, and

they in their turn, after producing polyp buds, die, leaving the stony substance behind. This process goes on, until this stony substance has grown up like a tree. At last it comes to the surface of the water.

The little picture on the opposite page shows you the coral that forms islands, just as it grows. The small star-like appearances that cover it are the mouths of the coral animals.





These coral trees stand very close together as they come up through the water, and their branches cross and recross near the surface, until they seem almost like an interwoven floor. Then the dashing waves break pieces off,

that fall and lodge among the branches, and become a solid mass. Afterwards wood, seaweed, and other things that are continually floating about in the ocean, drift in upon this coral surface and decay there, and become earth or soil. In the course of time, a real island is formed upon the coral trees; and then cocoa-nuts and other seeds are floated by the water or blown by the wind upon the soil, and sprout and grow; and at length there

are trees and shrubs, and fruits and flowers. At last men come and make their homes there.

When these coral islands are built around the coast of other islands in long ribbons of beautiful verdure, they are called reefs. But the coral islands that are most beautiful of all are built in a circle, with a lake in the centre. These are named *atolls*, and the lakes they enclose are called *la*-

goons. There is always an opening on one side, and the water is deep, so that the lagoons make safe harbors for ships.

Above is a picture of an atoll, with ships in its lagoon.

Suppose all the water of the ocean were dried up, how would what is now the bottom of the ocean appear? Why, just as the dry land we live on appears. There would be plains and valleys, and hills and mountains; for most of the islands that rise out of the ocean are nothing but the tops of mountains whose sides reach down to the bottom of the sea.

[To be Recited.]

How many divisions of land are there?

There are two: continents and islands.

How do continents and islands differ?

Large bodies of land are called continents; smaller bodies of land, entirely surrounded by water, are called islands.

How many continents are there?

There are six: North America, South America, Europe, Asia, Africa, and Australia.

How do islands differ from each other?

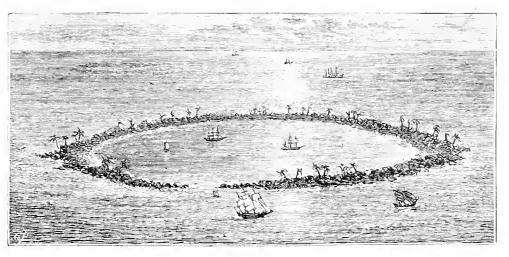
Some are large, others small; some are level, others mountainous.

What is the most wonderful kind of islands?

The islands made by the coral animal.

What are most of the islands?

They are the tops of mountains whose sides reach down to the bottom of the sea.



LESSON VI. FORMS OF THE LAND.

[To be Read.]

We have learned about the *divisions* of the land. Now we will learn about its *forms*. In the first picture on the next page we see land rising high in the air, summit above summit.

When land rises to a very great height, it is called a *mountain*. There are a great many



mountains on the surface of the earth. Sometimes they stand alone, but oftener they are in long rows, or ranges, called *chains*. There are some of these mountain chains on each of the continents, and there are mountains on a great many of the islands.

An elevation of land not so high as a mountain is called a hill. The edges of continents and islands, where they border on the water, are called shores or coasts. These shores or coasts are very seldom even and regular; but most of them have many points that stretch out into the water, and many openings through which the water flows up into the land. These points, or headlands, which extend from the coast-line into the water, are called capes. When, however, one of these headlands is joined to the mainland by a narrow neck of land, it becomes a peninsula; and the neck of land that joins it to the mainland is an isthmus.

In the next column is a picture that shows a coast-line or shore where the land meets the water. In the distance is a point of land extending into the sea; that is a cape. Nearer by is a peninsula, and the narrow isthmus or neck that joins it to the mainland. There is a wooded island also, and above the shore is a range of hills.

There are two other forms of land that need to be explained. They are a *plain* and a *valley*. A *plain* is a broad extent of level land. A *valley* is the low land between two mountains or along which a river runs.

[To be Recited.]

What is a mountain?

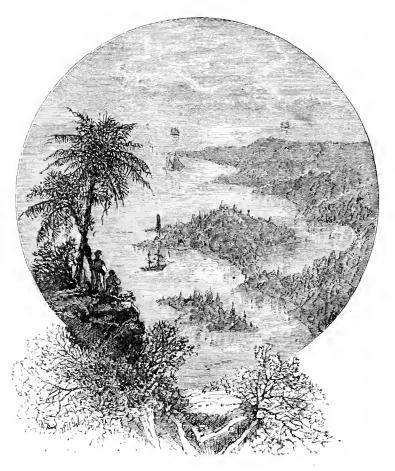
A mountain is land that rises to a very great height.

What is a hill?

It is an elevation of land that is not so high as a mountain.

What is a coast or shore?

It is the edge of the land where it borders on the water.



What is a cape?

It is a point of land extending into the water.

What is a peninsula?

It is a portion of land nearly surrounded by water.

What is an isthmus?

It is a narrow neck of land that joins a peninsula to another body of land.

What is a plain?

A plain is a broad extent of level land.

What is a valley?

A valley is the low land between two hills or mountains, or where a river runs.

LESSON VII.

DIVISIONS AND FORMS OF THE WATER.

[To be Read.]

Just as the largest bodies of land are called *continents*, so the largest bodies of water are called *occans*.

The oceans are not wholly separated from

each other by bodies of land. On the contrary, they are all connected, and really form only one vast body of water. But wherever a portion of this great body of water is partly separated from the rest it has a name to itself. It is called an ocean.

Thus the waters of the globe are divided into five great oceans. Their names are — Atlantic Ocean, Pacific Ocean, Indian Ocean, Arctic Ocean, and Antarctic Ocean.

The division of water that corresponds to an island is a *lake*. As an island is wholly surrounded by water, so a lake is wholly or nearly surrounded by land. And as a portion of land stretching out into the water is called a cape, so a portion of water stretching up into the land is a *gulf* or *bay*.

Below is a picture of a lake, and also of a gulf or bay. The lake is in the distance, at the foot of the mountain. Near by is a bay, with a light-house on the cape, to prevent the sailors from running their vessels ashore in the darkness.

An isthmus is a narrow neck of land connecting two larger bodies of land; and the form of water that corresponds to an isthmus is a *strait*. When a strait is quite broad and deep, it is called a *channel*; and a lake that is quite small is called a *pond*.

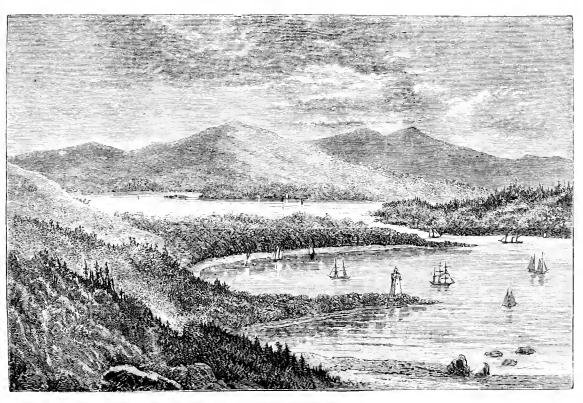
[To be Recited.]

What are oceans?

They are the largest bodies of water.

How many oceans are there?

There are five oceans.



What are the names of the oceans?

Atlantic Ocean, Pacific Ocean, Indian Ocean, Arctic Ocean, and Antarctic Ocean.

What is a lake?

A lake is a body of water wholly or very nearly surrounded by land.

What is a gulf or bay?

It is a portion of water stretching up into the land.

What is a strait?

It is a narrow passage of water connecting two larger bodies of water.

What is a channel?

It is a broad and deep strait.

LESSON VIII. SPRINGS AND RIVERS.

[To be Read.]

Nothing can live without water—neither plants nor trees nor animals. The places where no water is found and no rain falls are dry and lifeless *deserts*. But almost all the earth is supplied with water, and all this water comes from the ocean. All the water people drink and use, all that is running over the land or under the land, and all that is gathered into lakes and

ponds, comes, in the first place, from the ocean.

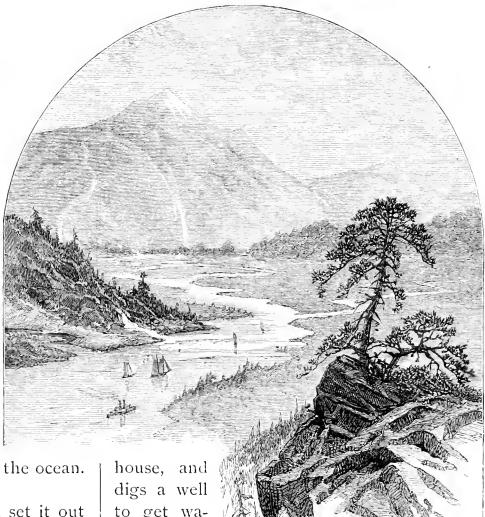
How does this take place?

If we put water into a vessel and set it out in the sunshine, it will gradually disappear, and at last will all be gone. When water disappears in this way, we may think it has been destroyed. But it has not been destroyed. It has gone off into the air. The warmer the weather is, the sooner water will thus pass off into the air; and sometimes we can see it passing off in a smoke-like form, called *vapor*.

From the vast surface of the ocean water is thus rising into the air all the time, and appears in the form of clouds. When the clouds are very thick and heavy with moisture, the little particles run together and form drops, that fall to the earth in rain. If it be cold weather, the particles are frozen as they pass through the air, and fall in the form of snow or hail.

So the rain comes down and sinks into the ground, and runs along in little channels beneath the surface. When a man has built a

te



house, and digs a well to get water for family use, it is one of these little under-

ground streams that fills his well with water. Sometimes up on the hill-sides or the mountain-sides these streams come to the surface of the ground and bubble out, and then they are called *springs*. The water that runs from one of these springs down the hill-side is a *rivulet*. Then several rivulets flow into a larger stream, and that is called a *brook*. At length several brooks flow together and make a still larger stream, called a *branch of a river*. At last, several branches mingling their waters in one channel, form a broad, deep *river*, that runs along hundreds of miles, perhaps, until it flows into the ocean. And there is the water all ready to rise in vapor and come down in rain, and run through the springs and the rivulets and the rivers to the ocean once more. In this way it keeps in motion in a ceaseless round.

[To be Recited.]

Where does the water on the earth come from?

It comes from the ocean.

How does it come from the ocean?

It rises from the surface of the ocean in vapor, which forms the clouds, and falls to the earth in rain.

What happens then?

It sinks into the earth and forms springs; springs form rivulets; rivulets run together and form brooks; brooks form branches of rivers; and branches of rivers form the rivers themselves.

LESSON IX. QUESTIONS FOR REVIEW.

[To be Recited.]

What is geography? What is the earth? What is the surface of the earth? What does the ground around us seem to be? Why does it seem to be part of a plain? What did people many years ago suppose the earth to be? How was the real form of the earth found out? What other proof can you give that the earth is round?

What is the meaning of the word "countries," as used in geography? Mention some of the things that we are to learn in our study of geography.

What does the word "hemisphere" mean? How many hemispheres are there? What are they called? How much of the earth's surface is land and how much is water?

Name the divisions of the land. What are continents? What are islands? How many continents are there? Name them. What is a coral island? An atoll? A lagoon? If the water of the ocean were dried up, how would what is now the bottom of the ocean appear? What are most of the islands that rise out of the ocean?

Name some of the forms of the land. What is a mountain? What is a chain of mountains? What is a hill? A shore or coast? A cape? A peninsula? An isthmus? A plain? A valley?

Name some of the forms of the water. What is an ocean? How many oceans are there? What are their names? What is a lake? A gulf or bay? A strait? A channel? A pond? What divisions of the water correspond to the divisions of the land?

Where does the water of the earth come from? Describe the way in which a river is formed.

LESSON X.

DAY AND NIGHT.—THE SEASONS.

[To be Read.]

Now we will learn the causes of day and night, and of the seasons—spring, summer, autumn, and winter; and how the sun keeps some parts of the earth always very hot, while other parts are very cold. One who is studying geography needs to know these things; for the kinds of productions that different countries yield—that is, their trees and fruits and flowers—the kinds of animals that live in them, and the kind of business their people are engaged in, depend very much on how cold or hot it may be.

People say "the sun rises" and "the sun sets." But that is only a way of speaking, because the sun only *scems* to rise and set. In reality it is not the sun that moves: it is the earth that turns around or revolves, and this makes the sun *scem* to go around it. For the earth has two different motions all the time. It turns around on itself—so to speak—that is one motion; and it moves in a circle around the sun—that is the other motion.

It turns around on itself once every twenty-four hours, and thus causes day and night. When the earth turns so far around that the light of the sun begins to come to any place, it is morning at that place. When it has turned so far that the sun is up in the middle of the sky at that place, then it is noon there. When it has turned so much farther that the place begins to lose the light of the sun, we have what is called twilight; and when the light has disappeared, it is night. Thus it is that we have day and night.

And not only does the sun give us light, but it gives us heat also. When is it the warmer—in the morning, when the sun has just risen, as people say; or at noon, when it is high up in the sky? At noon, certainly. That is almost always the warmest part of the day. This is because, when the rays of the sun fall slantingly, or *obliquely*, on the earth, as they do in the early morning, they do not make it so warm as when they come directly down—that is, when the sun is high up in the sky. So as the sun goes down in the west at evening, it grows cooler, because the rays fall very slantingly once more.

In like manner, the motion of the earth around the sun causes the change of seasons. As the earth moves around the sun, it goes in such a way that the rays of the sun fall more and more slantingly, or obliquely, on a part of it all the time for several months. The weather grows cool—too cool for the flowers and the trees to grow. We call this cooler weather autumn. At length the rays fall so obliquely that the ground freezes, the snow falls, ice covers the ponds, and winter has come. By and by the sun begins to go higher and higher in the sky day after day; it grows warmer and warmer, and we call the warmer weather spring. The sun continues to rise higher and higher, and when at last it is so high every day as to be very warm, the glad, growing summer-time has come.

[To be Recited.]

Where does the light we have come from?

It comes from the sun.

Does the sun rise and set?

It does not; it only seems to rise and set.

Why does it seem to rise and set?

Because the earth turns around on itself every day, and that makes the sun seem to go around the earth.

What two motions has the earth?

It is constantly turning around on itself, and it moves in a circle around the sun.

What do these motions cause?

One causes day and night; the other causes the seasons.

Why is it warmer at noon than it is in the morning or afternoon?

Because when the sun's rays fall obliquely on the earth, as they do in the morning and afternoon, they do not give so much heat as when the sun is nearly overhead, as at noon.

What makes the difference between summer and winter?

The sun's daily path across the sky is much higher in summer than in winter, and, therefore, its rays are warmer.

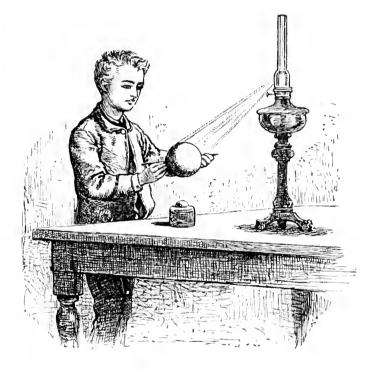
LESSON XI. THE EARTH'S BELTS OR ZONES.

[To be Read.]

Where we live, and in some other parts of the earth, the delightful changes of the seasons take place. We have the succession of spring, summer, autumn, and winter. But in some parts of the earth it is very warm, night and day, all the year; and in other parts it is always very cold.

We have learned that when the sun goes very high up in the sky, in its daily course, its rays are very warm. So this warm region must be where the sun's path, day after day, all the year round, is very high up in the sky.

In the picture below is a boy holding a ball before a lamp by the ends of a rod that is run through it. If he turns the ball around before the flame of the lamp, the light will fall directly on the part that rounds out towards it the most; and on the part on each side through which the rod comes out it will fall very obliquely.



Suppose this flame to be the sun, and this ball to be the earth turning around once every day, which part of the earth will be the hottest? It will be the part that rounds out the most towards the sun, and on which its rays, therefore, fall directly, or *vertically*. And which parts will always be very cold? Plainly, those parts where the sun's rays fall very obliquely; and they are found where the rod comes through the ball.

As the earth goes whirling around on itself, the part that rounds out most towards the sun is always very warm. There is no winter there—no ice, no snow.

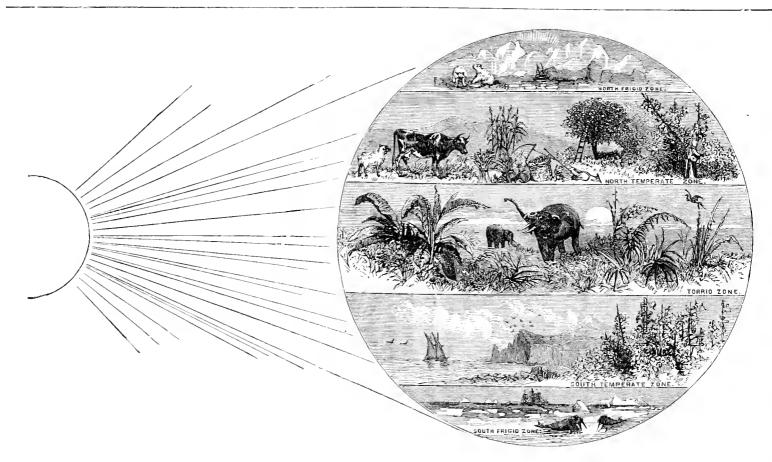
There the strange, great animals live—the elephant, the rhinoceros, the lion, and the tiger. On the borders of the rivers of those

hot countries we find the terrible water-beasts —the hippopotamus and the crocodile. The trees there are very different from our trees. There we find palms, with their great, broad leaves, like so many outspread fans. There, too, we find the trees from which India-rubber. or caoutchouc, is obtained; and it is out of the forests of those regions that men get the most beautiful kinds of wood of which furniture is made, such as rosewood and mahogany. The fruits, too, are different from ours. Cocoanuts, bananas, oranges, dates, and tamarinds come from those countries; there are found the rich-scented spices; and there the sugarcane grows, from which come sugar and molasses.

It can not be very pleasant to live where the vertical sun is so dazzling and so hot all the time. And it must be still more unpleasant to live in those other parts of the world where it is always very cold. In those cold regions the ice seldom or never melts; the trees are very small, and no grass, no fruit, no flowers, can grow. The people dress in seal-skins, to protect themselves from the terrible cold. They live on the fat of the whale, the seal, and the walrus, and travel over the ice and snow in sledges drawn by dogs.

It is about midway between these very hot regions and these very cold regions that we live, and our climate is temperate and delightful. Cocoa-nuts and pine-apples do not grow in our fields, but we have apples and pears and plums and cherries. Our farms do not produce coffee and spices, but they can produce grass and corn and wheat and vegetables. Our forests do not have rosewood and mahogany trees in them, but they have noble oaks and pines and maples and beeches. And instead of elephants and monkeys and beasts of prey, we have horses and cattle and sheep and other animals very useful to mankind.

The picture on the next page represents the earth as the rays of the sun fall upon it,



making some parts very warm, while other parts are very cold.

The picture also shows how the earth is divided into five belts or zones. The word zone means belt. In the middle is the zone on which the rays of the sun fall vertically, and which is, therefore, very hot. This is named the hot, or torrid, zone. Next to this zone, on each side, is another, on which the sun's rays fall a little obliquely, and which, therefore, has a temperate and pleasant climate. These two zones are called the tem-The word temperate means perate zones. One is the North Temperate moderate. Zone, the other is the South Temperate Zone. Beyond them, still farther away, are zones on which the sun's rays fall very obliquely, and which are, therefore, very cold. These zones are called the frigid zones. The word frigid means very cold.

We see growing in each of the zones the kind of vegetation that belongs to it, and we see some of the animals that live in it. How different the scenery, the vegetation, and the animals of the Torrid Zone from those of the desolate and dreary Frigid Zone!

[To be Recited.]

Are there four seasons in all parts of the earth?

There are not. Some parts of the earth are always very warm, and other parts are always very cold.

Where are the regions that are always very warm?

They are where the sun is vertical, or nearly so, all the year.

Where are the regions that are always very cold?

They are where the rays of the sun fall very obliquely all the year.

How is the earth's surface divided?

Into five belts or zones.

What is the middle zone called, and why?

It is called the Torrid Zone, because it is the region on which the sun's rays fall vertically, and where it is very warm.

What are the zones next to the Torrid Zone called?

One is called the North Temperate Zone,

the other the South Temperate Zone, because there the sun's rays fall so as to make the climate temperate.

What are the other two zones called?

They are called the Frigid Zones, because there the sun's rays fall very obliquely, and it is always very cold.

LESSON XII.

THE EQUATOR, AXIS, AND POLES.

[To be Read.]

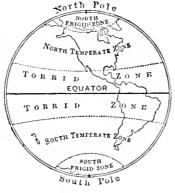
Let us look again at the picture of the boy turning a ball before the flame of a lamp. He turns it by means of a rod that runs through the centre of it, and that rod is called the axis of the ball. The points where the axis comes out of the ball are said to be its poles.

The ball is intended to represent the earth as it turns or revolves before the sun. But the earth has no rod running through it, for it revolves only on itself. Still, it is much easier to talk about the earth's motions by supposing that it does have a real axis on which it turns; and therefore people speak of the axis of the earth as though there were one actually running through its centre; and

of the *polcs* of the earth, just as though an axis came out of it, as the rod comes out of the

ball.

The axis of the earth is a line that is imagined to pass through its centre, and on which it turns; and the poles of



the earth are the points at the ends of the axis. One is called the North Pole, the other the South Pole.

The figure just given represents the Western Hemisphere. It shows where the poles are, and where the divisions between the It also shows a line that is imzones are. agined to pass around the earth, equally distant from each pole. This line is called the Equator.

[To be Recited.]

Has the earth a real axis on which it turns?

It has not. It turns only on itself.

Do people talk about the earth as though it had a real axis?

They do; because that makes it easier to describe its motions.

What, then, is the axis of the earth?

It is a line imagined to pass through its centre, and on which it revolves.

What are the poles of the earth?

They are points imagined to be at the ends of the earth's axis.

How many poles has the earth?

It has two poles.

What are they called?

One is called the North Pole, the other the South Pole.

What is the Equator?

It is a line imagined to pass around the earth equally distant from each pole.

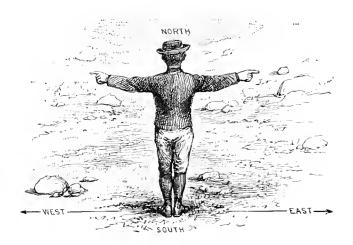
LESSON XIII. DIRECTION AND DISTANCE.

[To be Read.]

We can not go very far in the study of geography until we know how to determine the direction and distance of one place from another. This we will now learn.

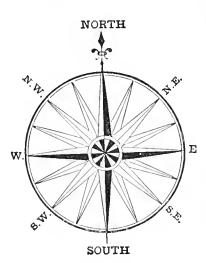
The circle all around us, where the earth and sky seem to meet, is called the horizon;

and that part of the horizon where the sun rises is called the *east*.



The boy in the picture is pointing with his right hand to the east, where the sun is rising. With his left hand he is pointing to the part of the horizon where the sun will set, and that is called the *west*. The part which he is facing is called the *north*, and the part behind him is the *south*.

Now with these names we can tell anybody in what direction to go to find any place he is seeking. For if the place is to the northward, we shall tell him to go north. If the place is to the southward, we shall tell him to go south. If it lies half-way between north and east, we shall tell him to go northeast; or if it lies half-way between the east and the south, we shall tell him to go southeast. In like manner, we have the names northwest and southwest for directions half-



way between north and west and south and west.

All these directions, taken together, make up what are called the *points of the compass*. And because north, south, east, and west are the chief points, they are called the *cardinal* points.

But in our study of geography it is necessary to have not only a name for the direction of one place from another, but also a name to measure the distance between them.

We have often heard people mention the common measures of length or distance, such as *inches*, and *fect*, and *yards*, and *miles*.

Here is the measure of an inch. It is the

shortest measure of length or distance that people use. Twelve inches make a *foot*—that is the next larger measure of distance. It is needful for us to learn these measures, so that we may be able to know them or to make them wherever we may be.

Also we need to know how long a mile is, because so many distances are given in miles. Perhaps we can think of some object—a street or a house, or something else—that is a mile, or part of a mile, away from our school-house; and by bearing in mind how long the distance seems, we shall be able to understand the length of a mile.

As soon as we understand the length of a mile, we can form a notion of what a very great ball the earth is; for the distance around it is nearly 25,000 miles.

[To be Recited.]

What is the horizon?

It is the circle where the earth and sky seem to meet.

Where is east?

It is that part of the horizon where the sun rises.

Where is west?

It is that part of the horizon where the sun sets.

Where are north and south?

If we extend our right arm towards the east, and our left arm towards the west, the

part towards which we face is the north, and the part behind us is the south.

What other points of direction are there?

Half-way between north and east is northeast; half-way between north and west is northwest; half-way between south and east is southeast; half-way between south and west is southwest.

What are these directions, taken together, called? The points of the compass.

What are north, south, east, and west called?

They are called the cardinal points, because they are the chief points.

What is the distance around the earth? About 25,000 miles.

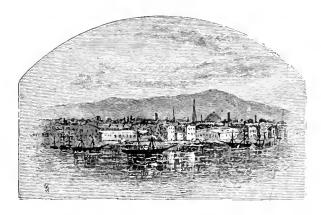
LESSON XIV. WHAT MAPS ARE.

[To be Read.]

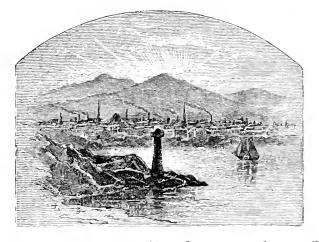
In studying geography we do not need to see pretty pictures of places so much as we need to find out how much ground they occupy, and in what shape they occupy it. It is important also to be able to see the direction in which one place in a country, or on a continent, lies from some other place, and to measure how far it is from one to the other; or to see, at a glance, how a chain of mountains extends through a country or a continent; or how a river flows through it, from its source all the way to its mouth.

This can not be done by means of pictures, as we can easily see; for pictures can not tell us either distances or directions. How shall we accomplish it?

Simply by marking off with lines on a piece of paper, or other flat surface, the objects we wish to represent, according to the shape they have where they rest on the ground. Here, for instance, is a picture of a city. In it we can see the shape of the houses, and the church steeples rising into the air, and the ships lying at the piers.

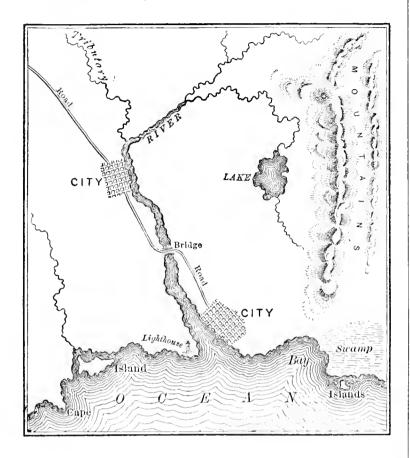


Below is a picture of another city. Like the former one, it gives us a good idea of the city which it represents. But these views of the two cities are not what is wanted. The cities are several miles apart—one on the right bank, the other on the left bank, of a river. There is a bridge across the river about half-way between the cities, a lake on one side, and a range of hills some miles farther away, extending into the distance, in which the river has its source. What is wanted is some plan by means of which all these things—the course of the river, and the position of the mountains, the lake, the bridge, and the cities—may be seen at one view, so that the size of each can be known as compared with the size of the others, and the di-



rection in which one lies from another. This can not be done by the use of pictures. So lines are drawn to represent the comparative

size of each of these objects, and its true position, in this way:



In making these lines and marks we have made a *map*; and though it only tells us the size and shape of the several objects, yet we get a good idea of how they are situated, and in what direction one is from another.

Now, in the same way that we can make a map that shall represent only a few places which are near each other, we can make those that shall represent a large extent of country, with its bays, rivers, mountains, cities, lakes, and other objects on its surface. For we can have a map made larger or smaller in size, just as we please, no matter how great an extent of country it is intended to show. The map of a whole continent has been correctly engraved on a piece of silver no larger than a dime.

The maps in this book are so made that the top is north, the right-hand side is east, the bottom is south, and the left-hand side is west. Most maps are made in this way.

To be Recited.

What is a map?

It is a representation of the whole or a part of the earth's surface by means of lines and marks on a flat surface.

What part of a map is north? East? South? West?

The top is north, the right-hand side is east, the bottom is south, and the left-hand side is west.

LESSON XV. QUESTIONS FOR REVIEW.

[To be Recited.]

Does the sun rise and set? Why does it seem to rise and set? What two motions has the earth? What causes day and night? Describe this motion. What causes the seasons? Describe this motion. Name the seasons.

How many zones are there? Name them. Where is the Torrid Zone? Where are the Temperate Zones? Where are the Frigid Zones?

What is the earth's "axis?" What are its poles? How many poles has the earth? What are they called? What is the Equator? What is the horizon? Where is east? West? North? South? Northeast? Northwest? Southeast? Southwest? What are the points of the compass? Which are the cardinal points? What is the distance around the earth? What is a map? What part of a map is north? East? South? West?

LESSON XVI. CONTINENTS AND OCEANS.

To be Read.

Continents.—We have already learned that one of the hemispheres is called the Western Hemisphere and the other the Eastern Hemisphere. The former is also called the "New World" and the latter the "Old World." It happened in this way:

Four hundred years ago the people of Europe, which is a continent of the Eastern Hemisphere, knew nothing about America. They did not know that there was such a country. Nearly every one believed the earth to be a vast plain.

But in 1492, Christopher Columbus, who believed that the earth was round, procured three small vessels, and set sail towards the setting sun. He did not know any thing of America. He supposed he should sail directly around to the East Indies, which is the name of a portion of Southern Asia and the neighboring islands. But after a long voyage of seventy-one days he came to a strange land; and when he returned home and told the people of Europe stories of the wonderful country he had discovered, they talked about it by the name of the "New World," for it had no name then, and it has been called by that name ever since.

We have learned that the Eastern Hemisphere contains four continents—Europe, Asia, Africa, and Australia. These continents, except Australia, which had not then been discovered, were called the "Old World," as soon as people began to talk about North America and South America as the "New World."

Oceans.—There are broad streams of water that flow through the oceans. They are called ocean currents. One of the most remarkable is the great current of warm water called the Gulf Stream. It is so called because it seems to start in the Gulf of Mexico. It flows out into the Atlantic Ocean, keeping its warm water all the time separate from the much colder water of the ocean. It sweeps along the coast of North America, and then, bending towards the east, washes the shores of Europe, and reaches even as far north as Iceland.

Iceland, were it not for this warm ocean current, would be much colder than it now is, and could have no settled population; for nothing could grow for inhabitants to live upon. But the Gulf Stream helps to make the climate quite temperate, and the whole coast of Europe is made milder and pleasanter by it.

There is a warm current in the Pacific Ocean, just as there is in the Atlantic. It flows up the coast of Asia, and then, bending around, washes

the shores of North America. It is this current, in part, that prevents the west coast of North America from having a cold and disagreeable climate.

The position and course of these remarkable ocean currents are represented on the map by fine white lines traced on the blue color of the ocean. (See maps on pages 24 and 25.)

The most important ocean thus far in the world's history has been the Atlantic; for it lies between Europe and America, and the most civilized nations have lived on or near its borders, and carried on commerce across its stormy waters. Thousands of vessels are constantly crossing and recrossing it.

[To be Recited.]

What is the Western Hemisphere sometimes called? It is sometimes called the "New World."

What is the Eastern Hemisphere called? It is called the "Old World."

What is the Gulf Stream?

It is a current of warm water.

Describe its course.

It starts in the Gulf of Mexico, and flows northward along the coast of North America; then, bending towards the east, it washes the shores of Europe, and reaches even as far north as Iceland.

What effect does it produce?

It makes the coast of Europe and its islands much warmer than they would otherwise be.

Is there a similar warm current in the Pacific Ocean? There is.

What effect does it produce?

It helps to prevent the west coast of North America from having a cold and disagreeable climate.

Which has been the most important ocean thus far?

The Atlantic Ocean; because the most civilized nations of the world have lived on or near its borders.

THE NEW WORLD.



WESTERN HEMISPHERE.

Questions on the Map of the Western Hemisphere.—What continents are in the Western Hemisphere? What isthmus connects them? Which of these continents is north of the Equator? Which is crossed by the Equator? What ocean is east of these two continents? What ocean is west of them? What ocean is north of North America? What strait connects the Arctic Ocean with the Pacific Ocean? What bay

is between the Arctic Ocean and the Atlantic Ocean? What ocean is in the southern part of the Western Hemisphere? What other name has it? (*The Southern Ocean.*) What sea is between North America and South America? What ocean current is east of North America? What one is west? What continent is northwest of North America? What strait separates them?

THE OLD WORLD.



EASTERN HEMISPHERE.

Questions on the Map of the Eastern Hemisphere.—What continents are in the Eastern Hemisphere? What isthmus connects Africa with Asia? Which two of these continents are north of the Equator? Which one is crossed by the Equator? Which is south of the Equator? What ocean is east of Asia? What ocean is south of Asia? What ocean is west of Europe and Africa? What ocean is north of Europe

and Asia? What ocean is south of the Indian Ocean? What sea is between Europe and Africa? What strait connects the Mediterranean Sea with the Atlantic Ocean? What seas are between Europe and Asia? What sea is between Asia and Africa? What ocean current is east of Asia? What one is northwest of Europe? Which is the largest of the six continents? Which is the smallest?

NORTH AMERICA.

LESSON XVII. QUESTIONS ON THE MAP.

[To be Recited.]

What ocean is north of North America? What ocean is east? What one is west? What sea is between North America and South America? What isthmus connects North America with South America? What strait separates North America from Asia? What ocean and sea does it connect? What bay and strait connect the Arctic Ocean with the Atlantic Ocean?

What is a mountain system? (A mountain system consists of several parallel chains or ranges of mountains.) What mountain system is in the eastern part of North America? What mountain system begins at the Arctic Ocean and extends the entire length of the western part of the continent? What is the southern part of this system called? What ranges of mountains are west of the Rocky Mountains?

What two countries occupy the greater part of North America? What country is northeast of British America? What country is south west of the United States? What country is southeast of Mexico?

To what country in Europe does Danish America belong? (Denmark.) Of what two islands does Danish America consist? To what country in Europe does British America belong? (Great Britain.) What territory of the United States is northwest of British America? What bay is in the eastern part of British America? What river in the northwestern part flows into the Arctic Ocean? What two rivers flow into Hudson Bay? What gulf is east of British America? What river flows into it? What large island is east of British America?

What lakes are between the United States and British America? What gulf is south of the United States? What four rivers of the United States flow into the Atlantic Ocean? What large river flows into the Gulf of Mexico? What one flows into the Pacific Ocean? What group of large islands is southeast of the United States? Name the four largest. What is the capital and chief city of Cuba? What group of small islands is north of the West Indies?

LESSON XVIII. SIZE AND SURFACE.

[To be Read.]

We will now study each continent, one after another—its countries, its climate, its people, its animals, its productions, and many other things that it will be important as well as pleasant for us to know; and so, step by step, we shall get a little knowledge of the whole world. We will take North America first, because that is the continent on which we live.

Size.—We will first learn something about its size. It extends from the Arctic Ocean on the north—the region of perpetual ice—through the whole width of the North Temperate Zone, into the Torrid Zone—the zone of melting heats and abundant vegetation. So it has all kinds of climate and all kinds of scenery and productions.

It is about 4500 miles long, and more than 3000 miles wide in its widest part. It has three oceans and a vast gulf for its boundaries. It has the Arctic Ocean on the north, the Atlantic Ocean on the east, the Gulf of Mexico on the south (in part), and the Pacific Ocean on the west and south.

Surface.—We will next learn about its surface—how much of it is level and how much mountainous; how much is fertile and how much rocky or sandy and barren; where the rivers are and what parts of the territory they drain.

Look on the map at the dark, irregular figures that are meant to represent mountains. See how mountainous some parts of this continent are, and how the mountains stand in long chains or ranges extending always northward and southward. Near the coast, in the eastern part, extending from the Gulf of St. Lawrence nearly to the Gulf of Mexico, is what is called the Appalachian



[Ap-pa-la'-chi-an] system. These mountains are not very high—not nearly so high as those of some other systems—but they are very valuable to the United States; for in them is found much of the coal on which millions of people depend for their household fires, and for the steam which they use in carrying on their different occupations. In and near these mountains, too, are mines of iron, the metal from which so many useful things are made.

Leaving the Appalachian system and going westward, we pass over a broad space in which there are no mountains, and come to a very long system that begins on the borders of the Arctic Ocean and extends the whole length of the continent. The northern part of this great system is called the Rocky Mountains. The southern part is called the Sierra Madre [Se-er'-rah Mah'-dray]. Sierra means a saw; and these mountains are called by this name because at a distance the sharp peaks look like the teeth of a saw.

The Rocky Mountains are very high. Some of their peaks reach the height of from 14,000 to 15,000 feet. In these mountains are valuable mines of gold and silver. Here, too, is some of the grandest scenery in the world.

Still farther to the west are parallel ranges called the Cascade Mountains, the Sierra Nevada [Nay-vah'-dah], and the Coast Ranges. The Sierra Nevada are very high, their loftiest peaks being always covered with snow; and in these mountains, as in the Rocky Mountains, are rich stores of gold and silver, which thousands of persons are always busy in digging out, down in the dark caves called mines.

There is another important thing for us to know about the mountains of North America. Here and there in the ranges near the coast of the Pacific Ocean are those awful wonders of creation called volcanoes. These are mountains that send forth flames, ashes, and melted rocks from their tops. They be-

gin as far north as the Alaska peninsula, and follow the coast to South America, being most numerous in the southern part.



VOLCANO AND EARTHQUAKE.

Wherever volcanoes are found there are likely to be earthquakes; and in Mexico and Central America cities are sometimes destroyed and many lives lost by means of these terrible convulsions of the earth.

[To be Recited.]

How many miles long is North America? It is about 4500 miles long.

How many miles wide?

It is 3000 miles wide in its widest part.

How many mountain systems has it?

It has three mountain systems.

Name the two principal systems.

The Appalachian system and the Rocky Mountain system.

What mountain ranges are near the western coast?

The Sierra Nevada, the Cascade Range, and the Coast Ranges.

Which of these mountain ranges are the highest?

The Rocky Mountains and the Sierra Nevada are the highest.

What is the height of their summits?

Many of their summits range from 14,000 feet to 15,000 feet high.

In what part of North America are the volcanoes?

They are on the Pacific coast, and are most numerous in the southern part.

LESSON XIX. LAKES AND ISLANDS.

[To be Read.]

Lakes. — We will now learn something about the "Great Lakes" of North America, for they are very remarkable. Their names are: Lake Superior, Lake Michigan, Lake Huron, Lake Erie, and Lake Ontario. They are really vast inland fresh-water seas. Lake Superior, the largest, is 355 miles long and 160 miles wide. These lakes are joined together by straits and rivers, and great cities have grown up on their shores in consequence of the commerce that is carried on across their waters.

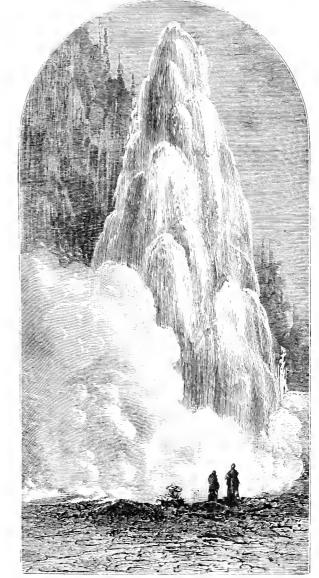
Between two of these lakes, Erie and Ontario, is that wonder of the world, the "Falls of Niagara," where the waters of Lake Erie plunge down a precipice of 163 feet. There are some cataracts that are higher than this; but no one is known where the quantity of falling water is so immense. The noise of the falls is heard several miles away.

There are other very large lakes on this continent, but they are too far north to be useful.

Islands. — Some of the islands of North America are large and important. Iceland, 250 miles east of Greenland, in the Atlantic Ocean, belongs to a country in Europe called Denmark. The climate is softened by the Gulf Stream, and grass and several kinds of vegetables are produced. The inhabitants are well-educated and industrious. The island has many volcanoes and hot springs, or geysers.

Greenland is a very large island, and is so cold that it has no productions and few inhabitants. It also belongs to Denmark.

Newfoundland, another large island in the Atlantic Ocean, belongs to Great Britain. The inhabitants live chiefly by fishing.



A GEYSER

But the most remarkable islands of this continent are the West Indies, an extensive group lying between North America and South America. It was on one of these islands that Columbus made his first landing when he discovered the "New World." Nearly all of them are in the Torrid Zone—that part of the world on which the sun shines directly or almost directly every day, and where it is always very warm. On these beautiful, fertile islands the inhabitants raise great quantities of sugar, coffee, cotton, and tobacco, and many spices and medicinal plants. Here, too, grow the delicious fruits which we all relish so much-oranges, bananas, and pineapples.

Cuba, the largest and most productive of this group, belongs to Spain. Hayti, the next largest, is independent. Jamaica, the third in size, belongs to Great Britain. Porto Rico, the fourth in size, belongs to Spain. The rest belong to different nations in Europe. Havana, the capital of Cuba, is the largest city and the chief commercial port of the West Indies. Its harbor is one of the largest and safest in the world.

[To be Recited.]

Which are the Great Lakes?

Lake Superior, Lake Huron, Lake Michigan, Lake Erie, and Lake Ontario.

Which is the largest?

Lake Superior.

What wonderful falls are between Lake Erie and Lake Ontario?

The Falls of Niagara.

How high are they?

They are 164 feet high.

What islands of North America belong to Denmark? Iceland and Greenland.

What is said of the climate of Iceland?

The climate is softened by the Gulf Stream, and grass and several kinds of vegetables grow.

What kind of a climate has Greenland?

It is so cold that it has no productions and few inhabitants.

What other large island belongs to North America? Newfoundland.

What is the chief occupation of its inhabitants? Fishing.

Which are the most important islands of North America? The West Indies.

In what zone are most of the West Indies? The Torrid Zone.

What are the chief productions of these islands? Sugar, coffee, cotton, tobacco, and fruits.

Name some of the principal fruits.

Oranges, bananas, and pine-apples.

Name the four largest of this group of islands.

Cuba. Hayti, Jamaica, and Porto Rico.

LESSON XX.

RIVERS, SOIL, AND PRODUCTIONS.

[To be Read.]

Rivers.—There are no rivers in the world that are of greater service to mankind than those of North America. They are very numerous, and many of them are navigable—that is, are so deep that ships can sail on them. Rising among the mountains, they flow in every direction. There is not a large inlet, or bay, that has not one or more rivers running into it. In the north, two or three great rivers flow into the Arctic Ocean and Hudson Bay. But they are not useful, because they are almost always blocked up by ice, and much of the region they flow through is unproductive because of the cold.

But in the east the rivers are very important, and have large cities on their banks that carry on an extensive commerce. There are the St. Lawrence, the Hudson, the Delaware, the Potomac, and the Savannah. In the south, flowing into the Gulf of Mexico, is that broad and noble river, the Mississippi, one of the most useful in all the world. Draining a large part of the continent, and navigable for thousands of miles, with large branches that are also navigable for long distances, it forms a highway for the products of millions of people. Some of the largest, wealthiest, and most prosperous cities in the country are on its banks.

In the west there are fewer rivers, and only one of great importance—the Columbia.

There are many smaller rivers, chiefly in the eastern part of the continent, that are very valuable, because their currents have such a steep descent that, when dammed up, they furnish water-power to turn the wheels of many factories.

But it is of very little use to a country

to have mines and navigable rivers, and a pleasant, fruitful climate, if it have not also a fertile soil, so that the people can produce the necessaries of life.

Soil.—A large part of the soil of North America is fertile. The northern portion is unfruitful because of the cold; and much of the land west of the Rocky Mountains consists of barren heights and sandy plains. But the strip of territory between the Appalachian Mountains and the Atlantic Ocean, about 100 miles wide, is very fertile; while the vast Central Plain, lying between the Appalachian and the Rocky Mountains, sometimes called the Valley of the Mississippi, is remarkable for its fertility. The valleys of the extreme western part of the continent are very productive; there is abundant vegetation also in Mexico and Central America.

Productions.—In the portions of the continent that lie in the Temperate Zone large crops of wheat, maize, oats, rye, and hay are gathered from year to year. All the well-known vegetables, also, are produced in abundance. In the southern portion the inhabitants cultivate maize, sugar-cane, and sweet-potatoes. They also raise great crops of cotton and tobacco.

Of fruits, few kinds can be named that do not grow to perfection somewhere on this great continent: apples, pears, plums, grapes, peaches, and cherries in the north; oranges, bananas, figs, and pine-apples in the south. Nature has done everything here to make men prosperous and happy—if only they will be true to their advantages and to themselves!

[To be Recited.]

Are there many rivers in North America?

There are; and some of them are among the largest and most useful in the world.

What is the soil of North America?

A large part of it is very fertile.

Which is the most fertile portion?

The Great Central Plain.

What is the Great Central Plain?

It is the vast tract of land lying between the Appalachian Mountains and the Rocky Mountains.

What other name has it?

The Valley of the Mississippi.

What are the staple productions of North America?

In the Temperate Zone, wheat, maize, oats, rye, vegetables, hay, cotton, and tobacco; in the Torrid Zone, maize, coffee, sugar-cane, and sweet-potatoes.

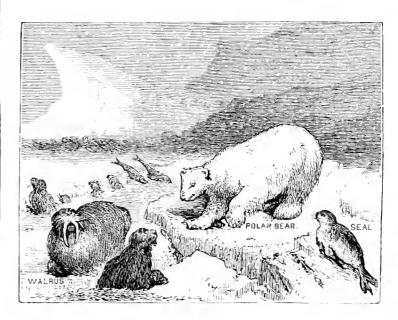
What fruits are raised in North America? Almost all the fruits known to the world.

LESSON XXI. ANIMALS AND INHABITANTS.

[To be Read.]

Animals.—We have learned that because North America extends from the icy regions of the North to the hot regions near the Equator, it produces all the kinds of vegetation that are found in the different climates. For the same reason it has a great variety of native animals.

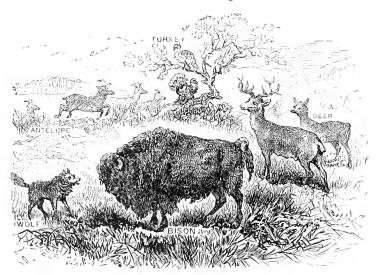
Here are pictures of some of its wild beasts



and birds, and below is a short description of them.



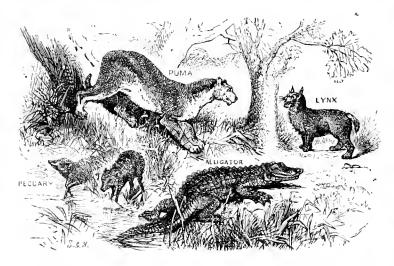
First we have the seal, the polar bear, and the walrus, which live in and near the Arctic Ocean, and supply the inhabitants of those icy regions with food and clothing. Then we have beasts and birds that can not endure such severe cold, and for this reason live near the borders of the Temperate Zone. Such are the bald eagle, the big-horn, the grizzly bear, and the moose; such, too, are the beaver and the otter, whose fur is sought after for use in wearing-apparel. Then we have the wild turkey, which is found in large numbers in the forests of the Temperate Zone; the



deer and antelope, which are also very numerous on the plains and the mountains; and

the huge bison, or buffalo, which lives in great herds on the western plains, and supplies the Indian tribes living in that region with their chief article of food.

The peccary, a small animal, much like a hog in appearance, lives in the wildernesses of Mexico and Central America; and the ugly-looking alligator is found in the rivers of the southern part of the continent. The opossum, the lynx, and the panther are also found in different localities.



Inhabitants.—There is also a great variety of inhabitants in North America. In addition to the native inhabitants—that is, the people who lived there before it was discovered by Columbus—there are people from almost every other part of the world.

Among the icebergs of the north are the Esquimaux [És-ke-mo], who are clad from head to foot, both men and women, in the fur of the seal. They travel in sledges made of the bones of whales, and drawn by dogs. Their houses are built of snow, and their food is the fat of the walrus, whale, and seal.

Farther to the south, on the western plains, and among the Rocky Mountains, the savage Indians live and roam about. They are proud, selfish, and cruel. They spend their time in hunting the buffalo on the plains, going on the war-path against some other tribe or against the white settlers, or in the warm, sunny weather lazily sauntering around

their wigwams, while the women perform the labors of the family, grinding the corn and cooking the food.

What a contrast to this savage creature is the civilized white man, who, in the same zone, is engaged in tilling the soil, carrying on commerce, or working with the tools of the mechanic, and thus providing for himself a comfortable home!



ESQUIMAUX.

In the extreme west are many thousands of Chinese laborers from Asia; and in the cotton, sugar, and rice fields of the south, in the West India Islands, and also scattered about almost everywhere among the white population, are negroes, whose forefathers were brought from Africa.

In Mexico and Central America are *creoles*, who are the descendants of the Spanish conquerors of the country. They are better educated than the rest of the population, and are very proud and haughty. Then come the *mestizos* [mes-te'-zos], or mixed race—the descendants of the Spaniards and the native Indians. These are the soldiers, merchants, and mechanics, and form the middle class. The Indians, who form a third class, live in villages and till the ground, but are for the most part ignorant and degraded.

[To be Recited.]

Name some of the native animals of North America. The seal, the walrus, the white bear, the grizzly bear, the moose, the beaver, the deer, the antelope, the buffalo. and the alligator.

What varieties of inhabitants do we find in North America?

Near the Arctic Ocean we find the Esquimaux; in the temperate regions the civilized white man, the Indian, Chinese, and negroes; farther south, negroes, creoles, mestizos, and Indians.

LESSON XXII. QUESTIONS FOR REVIEW,

[To be Recited.]

How many hemispheres are there? What are their names? What is the Western Hemisphere sometimes called? Why? What is the Eastern Hemisphere sometimes called? Why? When and by whom was the New World discovered? How many continents are there? Which continents are in the Western Hemisphere? Which continents are in the Eastern Hemisphere? Which continents are north of the equator? Which are crossed by the equator? Which is the 'argest continent? Which is the smallest?

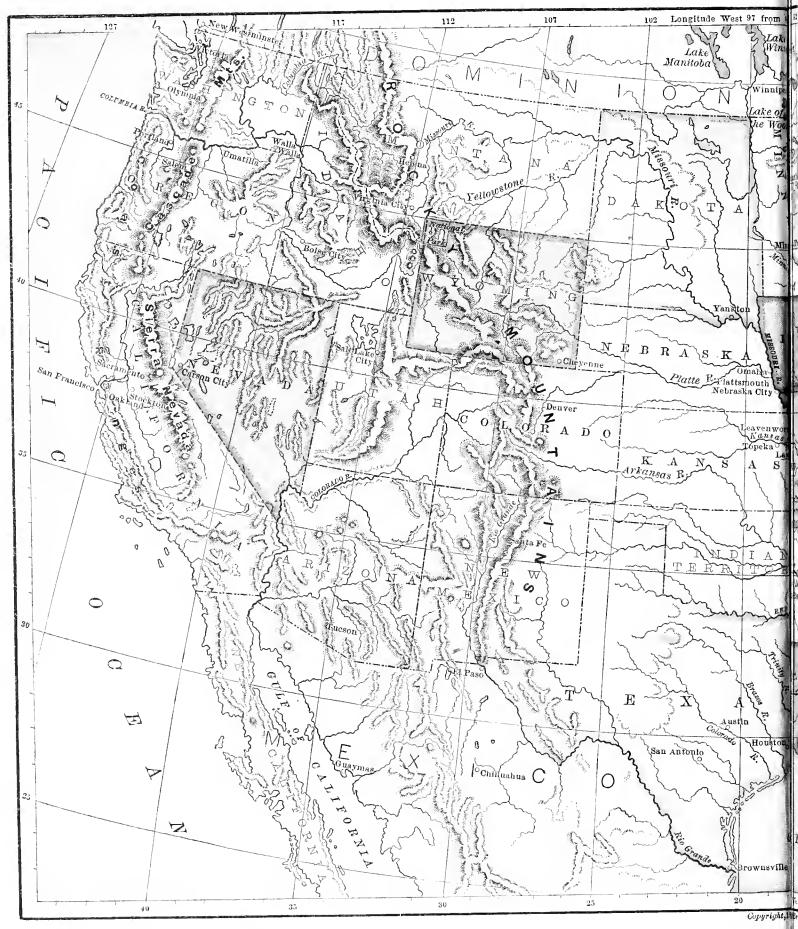
What is the Gulf Stream? Why is it so called? Describe its course. What effect does it have upon the climate of Iceland? What effect does it have upon the climate of Europe? Describe the warm current in the Pacific Ocean. How does this current affect the climate of North America? Which has been the most important ocean? Why has it been the most important?

Which continent occupies the northern part of the Western Hemisphere? What continent is southeast of it? What isthmus connects them? What continent is northwest of North America? What strait separates them? What mountain system is in the eastern part of North America? What one is in the western part? What is a mountain system? Name the countries of North America?

Why has North America a great variety of climate and productions? How long and how wide is it? What are its boundaries? Why are the Appalachian Mountains valuable? Why are the Rocky Mountains valuable? In what part of the continent are volcanoes? What is a volcano? Name the "Great Lakes" of North America. Where are they? Name the most important islands of North America.

Which is the largest river in North America? Name five important rivers in the eastern part of the continent. Why are they important? Of what use are many of the smaller rivers? Are the rivers in the northern part of the continent useful? Why?

What is said of the soil of North America? What are the principal productions? Name some of the native animals. Name some of the different varieties of inhabitants that we find in North America.



Questions on the Map of the United States.—What country is north of the United States? What country and what gulf are south? What ocean is east? What ocean is west?

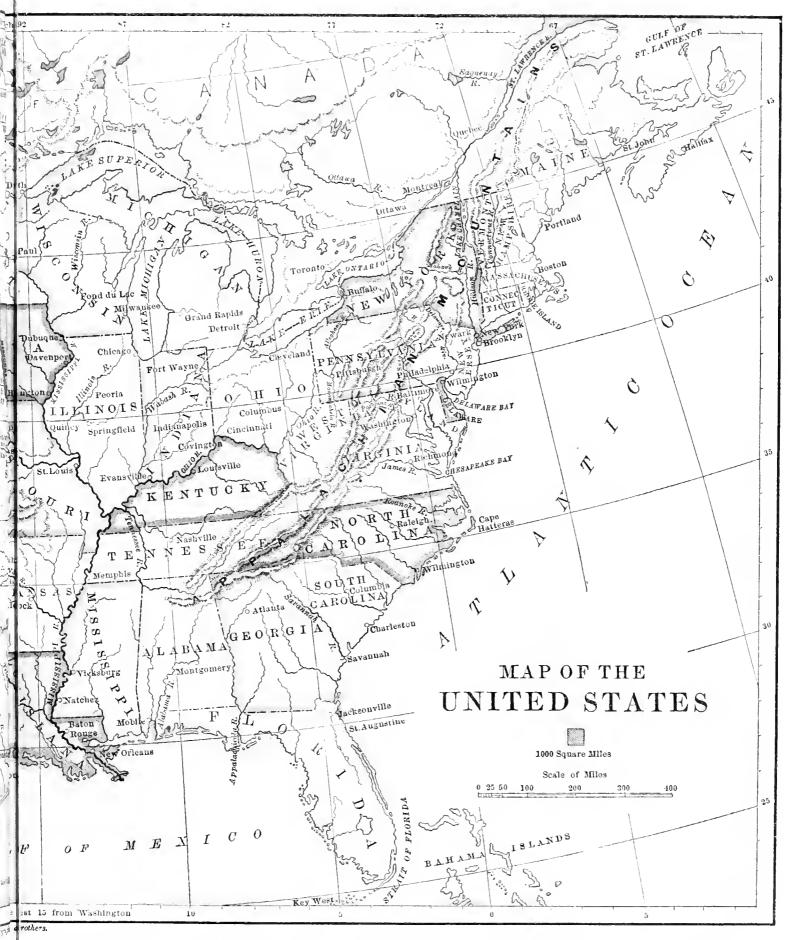
Which of the Great Lakes are between the

United States and the Dominion of Canada? Which one is wholly in the United States? What river is the outlet of these lakes? Into what gulf does it flow?

What mountain system is in the eastern part

of the United States near the coast of the mountain system is

What name is given States between the



men untain ranges are in what great me ranges?

is art of the United Mountains and the Rocky Mountains? (*The Great Central Flain*.) What river drains it? Into what gulf does it flow? What is the largest eastern branch of the Mississippi? What are the three largest western branches? What large river is in the northwest-

ern part of the United States? Into what does it flow? Where is the Gulf of California? What river flows into it? What peninsula is in the southeastern part of the United States? Between what two bodies of water is it?

LESSON XXIII.

THE UNITED STATES.—HISTORY, GROWTH, AND PRODUCTIONS.

[To be Read.]

We have learned about North America, the continent in which our own country is situated, and now we will learn about our country itself—the "United States." We will first learn how it came to be called the United States.



PRAIRIE ON FIRE-FLIGHT OF WILD ANIMALS.

Columbus discovered America in 1492, as you have already learned. In fitting out his vessels for the voyage, he was aided by the Queen of Spain, and in her name he took possession of the countries he discovered. Then the Spaniards came and made themselves masters of the West Indies, Mexico, Florida, and a great part of South America.

The English, the Dutch, and other nations of Europe, also made settlements, one after the other, along the Atlantic coast from Florida as far north as the Gulf of St. Lawrence. In the course of time all these settlements fell into the hands of the English.

These settlements were called colonies at that time; for a colony is a body of persons who have settled in a new country, but are still under the rule of their mother country—that is, the country from which they came. These colonies grew more and more prosperous, until, about a hundred years ago, thirteen of them united in a war against their mother country, England, because they were unjustly taxed and otherwise oppressed. Hardly had the war begun, when the colonies took a yet bolder step. They resolved to be governed no longer by England, and declared

themselves "free and independent states." They also united in a government for the whole, in order that they might assist each other; and the country whose government they thus formed they called the United States. After nearly eight years of fighting, England gave up the contest, and acknowledged the independence of the colonies. This change of government is called the Revolution, and the war for independence is called the Revolutionary War.

These are the names of the thirteen colonies: New Hampshire, Massachusetts, Rhode Island, Connecticut [Con-néticut], New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, and Georgia.

Soon after the close of the war, the people of the United States, wishing to form a "more perfect union," in order that they might become a strong nation, made a new form of government, and adopted the Constitution under which we now live. This Constitution is the supreme—that is, the *highest*—law of the land.

The thirteen states that formed the Union

all lie between the Appalachian Mountains and the ocean. On the other side of the mountains, at the time of the Revolution, there were a few trading-posts only. The Indian, and the buffalo, the wolf, and other wild animals, had the old forests and the broad prairies all to themselves. By and by many of the more enterprising of the people sought new homes beyond the mountains. Crowding their household goods and families into huge covered wagons drawn by oxen, and going in long trains so as to protect each other from the Indians, they travelled slowly onward by day, and camped by some spring of water by night, until they came to a spot which they thought suitable for a settlement. they made log huts for dwellings; they cut down forests, and planted fields, and from these humble beginnings built up the flourishing villages, the large cities, and the immense business of the Great Central Plain.



WESTERN PIONEERS.

This new nation grew very rapidly. Thousands of the poor and the oppressed of Europe sought homes in the New World. Manufactories were built, and thriving villages grew up on many a stream. Commerce, too, increased; cities multiplied on the coast, and their ships visited the ports of all the world.

At length our country, already extending

from ocean to ocean, was enlarged by the addition of California. Gold was found in great quantities in the mountains of that state, and crowds of people flocked to them to search for this precious metal; towns grew up as if by magic; the port of San Francisco, having one of the largest and safest harbors in the world, was opened to commerce; and the United States became more prosperous than ever before.

How different the condition of our country now from what it was at the time of the Revolution, when the union of the colonies was formed, and the nation took the name of the United States! Then there were only thirteen states, with hardly three millions of people; now there are thirty-eight states, with more than forty millions of people. There are thirty cities that have more than fifty thousand inhabitants each. Boston, that had only about twenty-five thousand at the close of the Revolution, now has three hundred and fifty thousand; and New York has grown to be a magnificent city, with more than a million inhabitants. It is the metropolis—that is, the largest city—of the country. Then there were no canals, no railroads, no steamships, and few manufactories. Now canals, some of them hundreds of miles long, carry the productions of one part of the country to another; steamboats ply on every navigable stream, and steamships run from the Atlantic ports to Europe, and from San Francisco to Asia and Australia. Railroads extend in every direction. Where a few persons travelled in the old-fashioned stagecoaches, thousands now travel in comfortable rail-cars; and instead of spending a week in going from New York to Washington, one can go easily in seven hours. Indeed, there is a railroad across the whole country from ocean to ocean, and we can go from New York to San Francisco, three thousand miles, in a single week!

There are manufactories almost everywhere. And not only do the people produce and manufacture enough for themselves, but they send vast quantities of productions to other countries, the chief of which are cotton, breadstuffs, provisions, petroleum, gold, silver, and tobacco; and they obtain in exchange, besides other things, dry goods, fruits, and metals from Europe, sugar from the West Indies, coffee and hides from South America, and tea, coffee, and spices from Asia.

Such was our country when it became free; such is our country now.

[To be Recited.]

What is a colony?

A colony is a body of persons who have settled in a new country, but are still under the rule of their mother country.

Why did the colonies in Λ merica unite in a war against England?

Because they were unjustly taxed, and otherwise oppressed.

Name the thirteen colonies that fought to be free fror England.

New Hampshire, Massachusetts, Rhod Island, Connecticut, New York, New Jersey Pennsylvania, Delaware, Maryland, Virginia North Carolina, South Carolina, and Georgia

What declaration did the colonies make?

They declared themselves "free and independent."

What is our war for independence called?

The Revolutionary War.

How long did it last?

Nearly eight years.

What was the result of the war?

England acknowledged the independenc of the colonies.

What are the chief *exports* of the United States—that i the chief productions sent to other countries?

The chief exports are cotton, breadstuffs provisions, petroleum, gold, silver, and tobacco

What are our chief *imports*—that is, the chief article brought from other countries to our own?

Our chief imports are dry goods, sugar hides, coffee, tea, fruits, metals, and spices.

LESSON XXIV.

QUESTIONS ON THE MAP OF THE NORTH ATLANTIC STATES, OR NEW ENGLAND.

[To be Recited.]

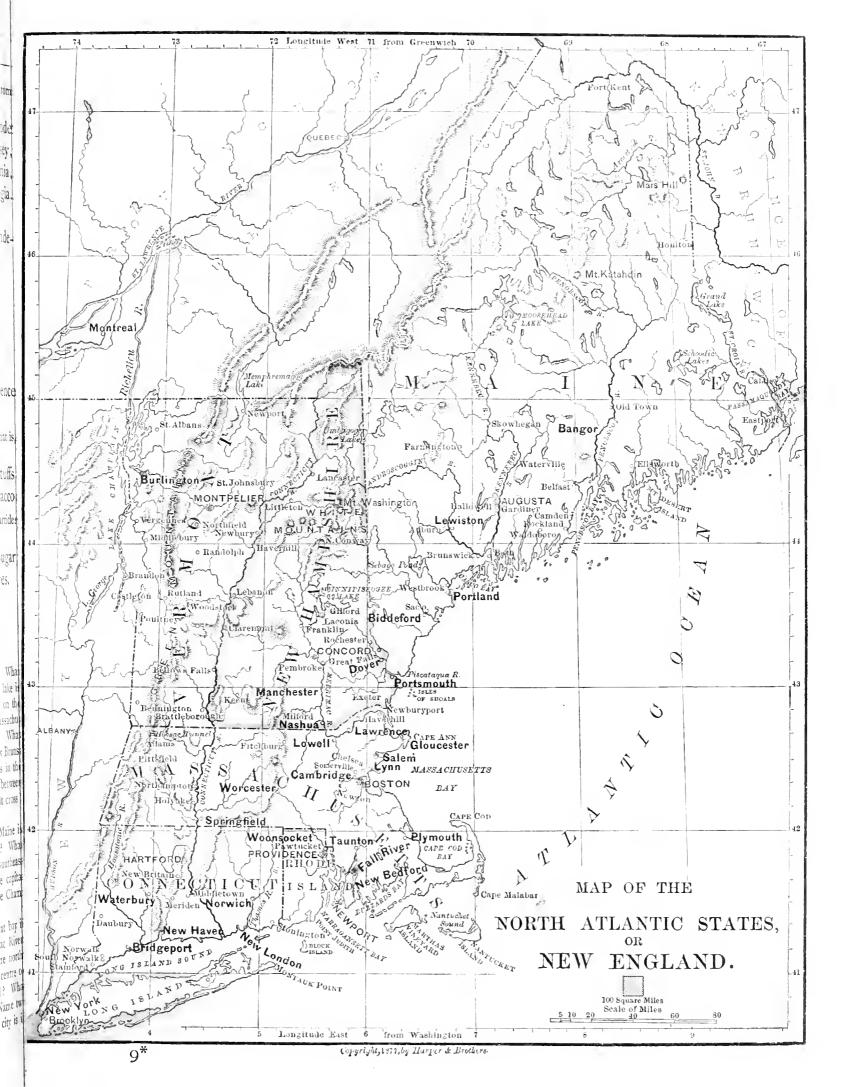
Which are the North Atlantic States? (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.) What province is north of this group of states? What province is east? What ocean is east and south? What state is west? Which is the largest of this group of states? Which is the smallest? Which border on the Atlantic Ocean? Which one has no sea-coast?

What part of this group of states is mountainous? What range of mountains is in the western part? What mountains are in New Hampshire? What mountain is in the northern part of Maine? What island is on the coast of Maine? What island is south of Connecticut? Of what state is it a part? (New York.) Name two capes on the coast of Massachusetts.

What lake is on the western border of Vermont? What lake is near the centre of New Hampshire? What lake in the northern part of Maine? Name three bays on the coast of Maine. What three are on the coast of Massachi setts? What one is on the coast of Rhode Island? What two rivers are between Maine and the province of New Brun wick? Name three rivers in Maine. What river is in the southern part of New Hampshire? What river is between New Hampshire and Vermont? What states does it cross Into what does it flow?

What is the capital of Maine? What city in Maine on Penobscot River? What one is on Casco Bay? Wh is the capital of New Hampshire? What city is southea of Concord? On what river is it? What is the capit of Vermont? What city in Vermont is on Lake Charplain?

What is the capital of Massachusetts? On what bay it? Name two cities in Massachusetts on Merrimac Rive What city is northwest of Boston? What two are norteast? What one is south? What city is near the centre the state? How many capitals has Rhode Island? What ethey? What is the capital of Connecticut? Name two cities in the southern part of Connecticut. What city is the eastern part?



LESSON XXV.

NORTH ATLANTIC STATES.—HISTORY, SURFACE, CLIMATE, ETC.

We have read and studied about the states

To be Read.

in our Union, taking them together as a na-But each of these states is important of itself. forming a part of the whole nation, under the general government, each has a government of its own. It has a Governor, who is the chief officer, and is chosen by the people; it has a Legislature, too, which is chosen by the people,

In addition to the thirty - eight states in the Union, there are ten territories. What a territory is will be explained in another part of this book.

and makes laws for

them. But no state

can have a law that

conflicts with the

laws of the United

States.

place which they named Plymouth. They came across the ocean in Besides

SCENE IN THE WHITE MOUNTAINS.

These states and territories will be divided for convenience into ten groups.

The first group, which we are now to study, consists of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. These states, taken together, are called the "North Atlantic States," because they are in

the northern part of the country and on or near the coast of the Atlantic Ocean. They are also called "New England." An English sea-captain, John Smith, who explored a part of the region, gave it this name in honor of England, his native country.

The first permanent settlement in New England was made by a company of Englishmen in 1620, on the coast of Massachusetts, at a

> a little vessel called the Mayflower; and because they had been compelled to leave their native land. and had been wandering in search

of peaceful homes, they have received the name of the Pilgrim Fathers.

Most of the early settlements in New England were made by people from England.

Surface.—Broken chains of the Appalachian system of mountains cross New Eng-

land from northeast to southwest, being nowhere very high except in New Hampshire, where they are called the White Mountains. In Vermont and Massachusetts they are called the Green Mountains. The White Mountains are much admired for their beautiful scenery.

There is fertile soil in some sections, especially in the valleys through which the rivers flow. But among the mountains the land is rocky, and much of it is too uneven to be tilled; near the coast it is sandy and barren; so that, compared with some other parts of

the country, the soil of New England is poor, and difficult to cultivate. The farmers have to work very hard for what they get.

Climate and Productions.— The climate is healthful; the winters are long and cold, but the summers are warm, and ripen all the plants that grow best in the temperate zone. Indian corn and other grains, hay, vegetables, and fruits, are produced in abundance.

Rivers and Lakes.—The most important rivers are the Penobscot and Kennebec [Kenne-béc], in Maine; the Merrimac, in New Hampshire and Massachusetts; and the Connecticut, which flows between New Hampshire and Vermont, and then crosses Massachusetts and Connecticut.

There are also many beautiful lakes. The most celebrated are Lake Winnipiseogee [Win-ni-pi-sok'-e], in New Hampshire; and Lake Champlain [Sham-plain'], on the western border of Vermont. The latter is a hundred miles long, and is so deep that vessels can sail on it from one end to the other.

[To be Recited.]

Name the North Atlantic States.

Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

When and where was the first permanent settlement made in New England, and by whom?

In 1620, at Plymouth, in Massachusetts, by people from England.

What mountains are there in New England?

There are broken chains of the Appalachian system, called White Mountains in New Hampshire, and Green Mountains in Vermont and Massachusetts.

What is the climate of New England?

The winters are long and cold, but the summers are warm.

What is said of the soil?

Compared with some other parts of the

country, the soil of New England is poor, and difficult to cultivate.

What are the productions of New England?

Indian corn and other grains, hay, and the vegetables and fruits of the temperate zone.

Which are the chief rivers?

The Penobscot, the Kennebec, the Merrimac, and the Connecticut.

Which are the most important lakes?

Lake Winnipiseogee, in New Hampshire; and Lake Champlain, on the western border of Vermont.

LESSON XXVI.

NORTH ATLANTIC STATES. — OCCUPATIONS OF THE PEOPLE.

[To be Read.]

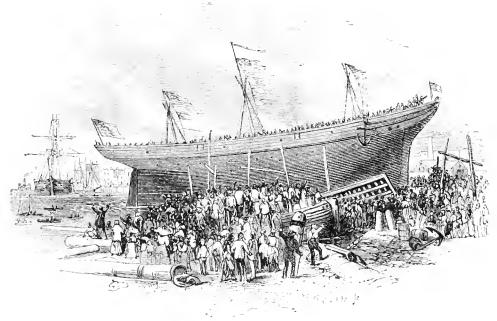
There are many farmers in New England. The people of the State of Vermont, which is very fertile, live chiefly by farming. Still the farms of this group of states do not produce enough to feed all the population. It could hardly be expected that they would; for three of these states—Massachusetts, Connecticut, and Rhode Island—are more thickly settled than any other states of the whole country, and most of their inhabitants are busy about something else than farming.

What do you suppose it is? You will surely be able to tell, when the places in which they live have been described to you. For men almost always engage in that kind of business which the place they live in gives them the best chance to carry on, and which therefore promises them good pay for their labor.

There are many streams in New England which come down from the hills with currents so rapid that they afford water-power to turn the machinery of mills and factories, and on

the banks of these streams we find many towns and villages. What is the chief business of their inhabitants? *Manufacturing*, you will say. All along the courses of these streams are mills and factories—mills to make woollen cloth, mills to make cotton cloth, to make paper, furniture, cars, locomotives—indeed, to make almost everything that is needed for our use. Steam-power is also much used in manufacturing.

The largest manufacturing places are Lewiston and Biddeford, in Maine; Manchester,



LAUNCHING OF A SHIP.

Dover, and Nashua, in New Hampshire; Fall River, Lowell, Lawrence, Worcester, Springfield, and Taunton, in Massachusetts; Providence and Woonsocket, in Rhode Island; and Hartford, New Haven, Bridgeport, and Waterbury, in Connecticut. Smaller manufacturing places are to be found in every direction.

There is a long extent of sea-coast with many fine harbors, on which are large and busy cities. What do their inhabitants occupy themselves with? *Commerce*, you will say. Yes; their harbors are full of vessels that are engaged in carrying products from port to port, and thus employment is given to many thousands of people.

Boston, the chief commercial port of Massachusetts, is the metropolis of New England. It was the scene of many exciting events at the time of the Revolution, and "Faneuil Hall" and the "Old South Church," where its citizens held their public meetings, are famous buildings. "Bunker Hill," where the second battle of the Revolutionary War was fought, is within the present limits of Boston.

Other important commercial ports in New England are Portland, in Maine; Portsmouth, in New Hampshire; Providence, in Rhode Isl-

and; and Hartford, New Haven, and New London, in Connecticut.

An abundance of wood is at hand, and iron is easily obtained. New ships are needed all the time, and there are excellent opportunities on the coast to build and launch them. So what other occupation are a great many likely to engage in? Ship-building, you answer. Yes; there is a great deal of ship-building in New England. It is carried on chiefly on the coast of Maine and of Massachusetts.

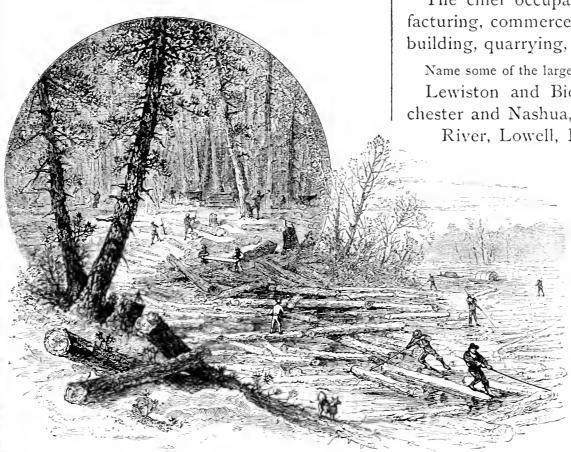
The ocean abounds in fish, and there are many people who are glad to get them for food; so there are many who follow the dangerous occupation of the fisherman.

Gloucester, in Massachusetts, is noted for the number of its vessels employed in the fisheries, and many villages near the coast of Maine are inhabited by the families of fishermen. New Bedford, in Massachusetts, is the chief port engaged in the whale-fishery.

There are vast forests in Maine and New Hampshire, and all over the country lumber is needed to build houses, and for many other purposes; so there are thousands of men who are engaged in *lumbering*, as it is called. They cut down the great trees in the forests, strip

them of their branches, haul them through the snow to the rivers, on which they are to be floated down to the saw-mills, to be cut up into all kinds of lumber.

In Vermont beautiful marble, which is a kind of limestone, abounds; also slate, and the limestone from which the quick-lime used in building is made. In Maine limestone is found, in New Hampshire and Massachusetts are ledges of very handsome granite, and in



LUMBERING.

Connecticut are beds of red sandstone. So there is a great deal of business done in *quarrying*, or getting out these kinds of stone—the marble, slate, granite, and sandstone for building, and the limestone to be burned in kilns to make lime.

There is still another important occupation in New England. It is *ice-cutting*. Great quantities of ice are cut in winter on the rivers and ponds of Maine, New Hampshire, and Massachusetts, and sent in vessels to countries where no ice forms.

Thus we have learned that the chief occupations of the people of New England are farming, manufacturing, commerce, fishing, lumbering, ship-building, quarrying, and icecutting.

[To be Recited.]

What are the chief occupations of the people of New England?

The chief occupations are farming, manufacturing, commerce, fishing, lumbering, shipbuilding, quarrying, and ice-cutting.

Name some of the largest manufacturing places.

Lewiston and Biddeford, in Maine; Manchester and Nashua, in New Hampshire; Fall

River, Lowell, Lawrence, Worcester, and

Springfield, in Massachusetts; Providence and Woonsocket, in Rhode Island; and Hartford, New Haven, and Bridgeport, in Connecticut.

Which are the chief commercial ports?

Boston, in Massachusetts; Portland, in Maine; Portsmouth, in New Hampshire; Providence, in Rhode Island; and Hartford and New Haven, in Connecticut.

Where is most of the ship-building carried on?

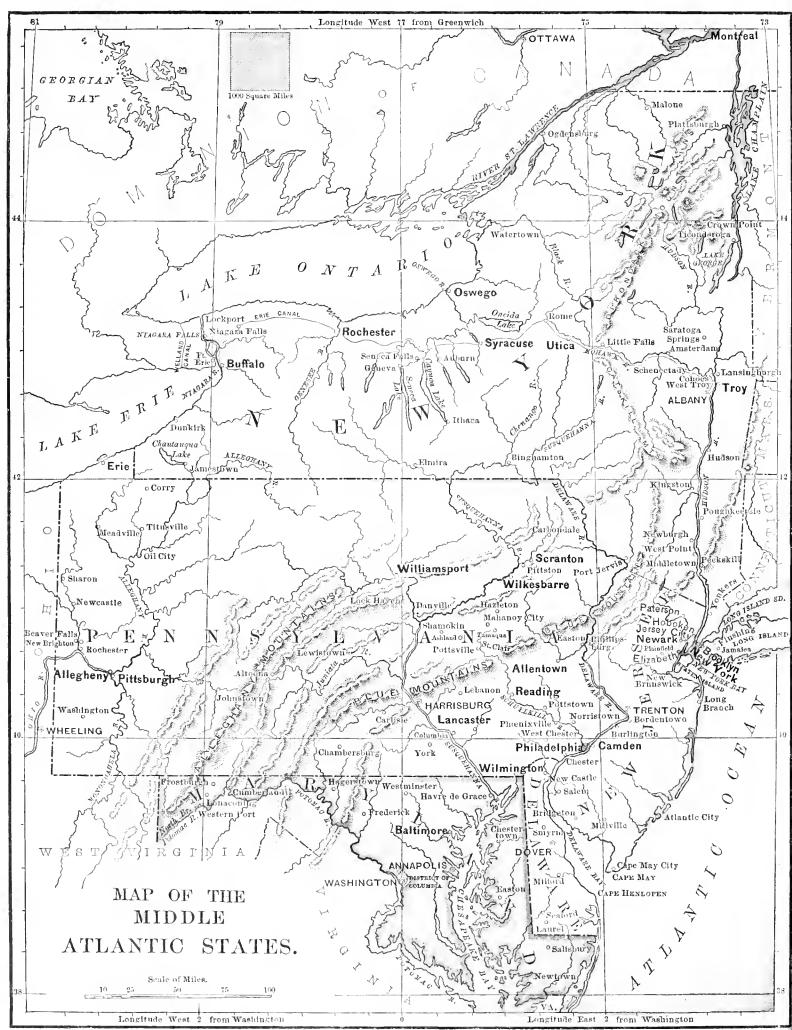
On the coast of Maine and of Massachusetts.

What cities in Massachusetts are noted for their fisheries? Gloucester and New Bedford.

Where is most of the lumbering carried on? In Maine and New Hampshire.

What quarries are there in New England?

Quarries of marble, slate, and limestone, in Vermont; of granite, in Massachusetts and New Hampshire; of limestone, in Maine; and of red sandstone, in Connecticut.



LESSON XXVII.

QUESTIONS ON THE MAP OF THE MID-DLE ATLANTIC STATES.

[To be Recited.]

Which are the Middle Atlantic States? (New York, New Jersey, Pennsylvania, Delaware, and Maryland.) What country is north of this group? What three states are east? What ocean is east? What two states are south? What three are west? Which is the smallest of this group of states? Which border on the Atlantic Ocean? Which one has no sea-coast?

Name two ranges of mountains in Pennsylvania. Which range crosses the western part of Maryland and the northern part of New Jersey? What mountains are in the eastern part of New York? What two islands are east of New Jersey? Of what state are they a part?

What two lakes are between New York and the Dominion of Canada? What lake is between New York and Vermont? What lake is south of Lake Champlain?

What large river is in the eastern part of New York? Into what bay does it flow? What river flows into the Hud-

son from the west? What two rivers flow into Lake Ontario? What two are between New York and the Dominion of Canada? What celebrated falls are in Niagara River. What river separates New York and New Jersey from Pennsylvania and Delaware? Into what bay does it flow? What river flows into the Delaware from the west? What large river crosses Pennsylvania from north to south? What river is in the western part of the state? What two rivers unite to form it? What river is between Maryland and Virginia?

What is the capital of New York? What city in New York is at the mouth of Hudson River? What city is on Long Island? What city is near the junction of Hudson and Mohawk Rivers? What city is on Lake Erie? What city is on Genesee River? What: two are nearly east of Rochester? What is the capital of New Jersey? Name three cities in the northeastern part of New Jersey.

What is the capital of Pennsylvania? What city in Pennsylvania is at the junction of Delaware and Schuylkill Rivers? What city is on Schuylkill River? What city is in the northeastern part of the state? What two cities are at the junction of Alleghany and Monongahela Rivers? What is the capital of Delaware? What city is in the northern part of Delaware? What is the capital of Maryland? What city is north of Annapolis?

What district is on Potomac River? What city does it contain? What is Washington? (The capital of the United States.)

LESSON XXVIII.

MIDDLE ATLANTIC STATES.—HISTORY, SURFACE, ETC.

[To be Read.]

Now we come to another group of states. They are called the "Middle Atlantic States," because they are on or near the coast of the Atlantic Ocean, and because they lie between the North Atlantic States, or New England, and the South Atlantic States. Their names are New York, New Jersey, Pennsylvania, Delaware, and Maryland.

This is a very important group, for it includes New York and Pennsylvania, the two most populous states in the Union.

New York was settled by the Dutch. It happened in this way: In 1609, eleven years before the Pilgrims landed at Plymouth and

began the first settlement in New England, Henry Hudson, the captain of a Dutch vessel, hoping to find a passage to India, just as Columbus had hoped when he first came across the ocean, sailed through what is now New York Bay, and discovered the noble river that bears his name. Then he returned to Holland, and told the people about the beautiful country he had seen. The next year Dutch merchants sent ships to trade with the natives, and some years later two permanent settlements were made—one at Albany, and the other on Manhattan Island. The latter, called New Amsterdam by the Dutch, was the beginning of what is now New York City, the metropolis of the country.

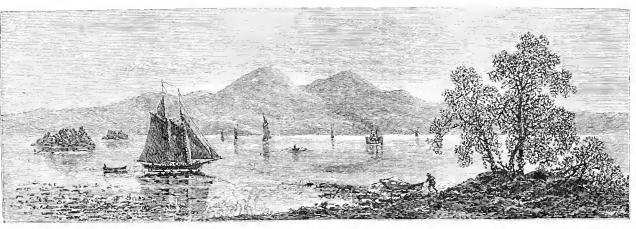
Pennsylvania was settled in 1682, by William Penn and a company of Quakers from England. New Jersey and Maryland were settled chiefly by the English; Delaware chiefly by Swedes.

Surface and Soil.—The Appalachian system of mountains extends across the state of New York near its eastern border, but the ranges are nowhere very high, except among the Catskills near the Hudson, and among the Adirondacks in the northern part of the state. Near the borders of New Jersey and Pennsylvania the high mountains begin again, and cross Pennsylvania and Maryland in several nearly parallel ridges from northeast to southwest. They are here called the Alleghany and the Blue Mountains. The middle and southern portions of New Jersey and

peaches, strawberries, and other choice products grow to perfection. Large quantities of these products are raised.

Delaware and the eastern part of Maryland produce peaches, melons, and strawberries for the northern markets. Tobacco and Indian corn also are raised in Maryland.

Rivers.—In New York is the noble Hudson, celebrated for its charming scenery. Between New Jersey and Pennsylvania flows the Delaware, on which is the great port of Philadelphia. In the central part of Pennsylvania is the Susquehanna; and at Pittsburgh,



AKE CHAMPLAIN.

Delaware, and the eastern half of Maryland, are nearly level.

Most of the soil, except in the mountainous regions, is very fertile.

Climate and Productions.—This group of states extends a distance of 500 miles from north to south. The climate of the most northerly state, New York, is therefore very different from that of the most southerly, Maryland, and the productions differ accordingly.

In New York and Pennsylvania, the amount of farm products—such as grain, hay, vegetables, butter, and cheese—is very great.

The level lands of New Jersey form one immense market garden for the supply of the great cities of Philadelphia and New York; for they have a delightful climate, and a light sandy soil, in which sweet-potatoes, melons,

in the western part, the Monongahela and the Alleghany unite to form the Ohio. The Potomac River forms a part of the boundary between Maryland and Virginia.

Lakes.—There are many beautiful lakes in the state of New York, the largest of which are Seneca Lake, Cayuga [Ca-yu'-ga] Lake, and Oneida [O-ni'-da] Lake. On its western borders are two of the chain of fresh-water seas called the "Great Lakes," and on its eastern border is Lake Champlain.

[To be Recited.]

Name the Middle Atlantic States.

New York, New Jersey, Pennsylvania, Delaware, and Maryland.

When and by whom was Hudson River discovered? In 1609, by Henry Hudson.

By whom and where were the first permanent settlements made in New York?

By the Dutch, at Albany and on Manhattan Island.

By whom was Pennsylvania settled?

By William Penn and a company of Quakers from England.

What mountain system crosses the Middle Atlantic States? The Appalachian system.

What are the ranges of this system called?

The Catskills and the Adirondacks, in New York; the Alleghany and the Blue Mountains, in New Jersey, Pennsylvania, and Maryland.

What is said of the soil of this group of states?

Most of the soil, except in the mountainous regions, is very fertile.

What are the chief agricultural products of New York and Pennsylvania?

Grain, hay, vegetables, butter, and cheese.

What are the chief agricultural products of New Jersey and Delaware?

Vegetables, peaches, and strawberries.

What are the chief agricultural products of Maryland?

Indian corn, tobacco, strawberries, melons, and peaches.

What are the most important rivers of this group of states?

The Hudson. New York: in the Delaware, between New Jersey and Pennsylvania; the Alleghany and the Monongahela, which unite to form the Ohio, in the western part of Pennsylvania; and the Potomac, on the southern border of Maryland.

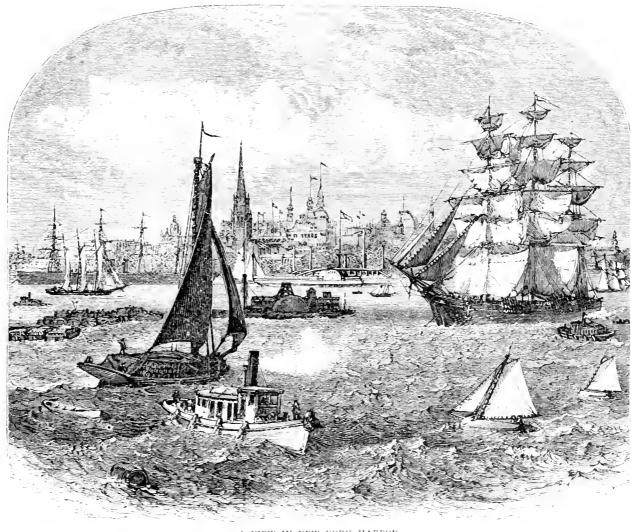
LESSON XXIX.

MIDDLE ATLANTIC STATES.—OCCUPATIONS OF THE PEOPLE.

[To be Read.]

We have learned that great quantities of farm and garden products are raised in the Middle Atlantic States; therefore many of the inhabitants must be occupied in *tilling the soil*.

Large numbers of people are employed in commerce. The glory of the State of New York is its commerce. The only place where it has any ocean coast, except on its islands, is at the city of New York. But the harbor of that city is one of the largest and safest in the world. Its waters are so deep that



A VIEW IN NEW YORK HARBOR.

ships of the heaviest draught can enter it at all seasons of the year. And what an amount of business is carried on by means of its waters year by year! New York has far more foreign commerce than any other city in the Union. Ships come to it laden with the productions of other countries—such as sugar, molasses, and spices; silk, woollen, cotton, and iron goods; gloves and jewelry; hides and coffee; tea and fruits, and many other things from all parts of the world. And in return they take away to other countries cotton, wheat, flour, butter, cheese, oil, tobacco, boots, shoes, and many other American products.

Why is it that New York has come to be such a vast commercial city? It is because it has had better means than other places for carrying on business with the interior of the country. For a seaport, in order to be prosperous, must have a good harbor, and cheap and easy means to send the goods its ships bring from abroad to those who need them in the interior, and also to bring the produce of the country to its ships, to be carried to other lands.

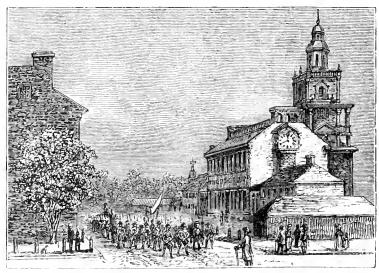
Such is the case with New York City. It is finely situated for an immense trade. First, there is Hudson River, on which vessels can sail a distance of 150 miles, to Troy. From Albany the Erie Canal, 363 miles long, makes a highway across the state, to Lake Erie. Then vessels on the Great Lakes can bring goods from all parts of the West and Canada, and carry back what may be wanted. Besides all this, railroads run in every direction, and furnish convenient means for carrying on trade with the millions of people in the interior of the country.

Brooklyn, Albany, Buffalo, Oswego, and Rochester are other commercial ports in the State of New York. Brooklyn is the largest city in the state, except New York.

The State of Pennsylvania, also, has reason

to glory in its commerce. Delaware River, on its eastern border, flowing into the Atlantic Ocean, affords secure and convenient harbors for ocean shipping. In the western part of the state, the Monongahela and the Alleghany, both navigable, unite to form the Ohio, and thus there are easy means of communication with the states of the Great Central Plain. The state also borders on Lake Erie, and shares the commerce of the Great Lakes; and it is amply supplied with railroads.

Philadelphia, its metropolis, situated on Delaware River, is one of the five great commercial ports of the country. In population it is the second city in the Union. It was in the "Old State House" in Philadelphia that the Declaration of Independence was signed, and the building is carefully preserved.



OLD STATE HOUSE, PHILADELPHIA, IN 1776.

Pittsburgh, at the junction of Monongahela and Alleghany Rivers, and Erie, on Lake Erie, are also important commercial ports in the State of Pennsylvania. So too are Jersey City, Hoboken, and Camden, in the State of New Jersey.

Baltimore, in Maryland, which has an excellent harbor, and is connected with the rest of the country by means of railroads, has a large commerce with foreign nations, and is the metropolis of its state. Many of the inhabitants of this group of states are engaged in *manufacturing*. The manufactures of New York and Pennsylvania are the most extensive and important. There are many manufactories also in New Jersey.

The most noted manufacturing places are New York City, Buffalo, Rochester, Troy, Syracuse, and Utica, in the State of New York; Newark, Paterson, Jersey City, and Elizabeth, in New Jersey; Philadelphia, Reading [Réding], Pittsburgh, Lancaster, Williamsport, and Allentown, in Pennsylvania; Wilmington, in Delaware; and Baltimore, in Maryland. Philadelphia is said to have nearly ten thousand manufactories within its limits.

Many of the people of Pennsylvania are employed in *mining*. This state is more remarkable for the products of its mines than for anything else. It is the chief mining state



COAL MINE.

in the Union. In the Alleghany Mountains are beds of anthracite or hard coal, that supply fuel to millions of homes, and the means of producing steam-power to vessels, locomotives, and factories. Scranton and Wilkesbarre are important cities in the anthracite

region. West of these mountains is a great quantity of bituminous or soft coal, which is used in making the gas that lights our houses and streets. Iron-ore of excellent quality is found in the earth side by side with the coal. There are also valuable coal-mines in the mountains of Maryland.

Pennsylvania produces that wonderful natural oil called *petroleum* (rock-oil), which is often used instead of gas for lighting houses and streets. It is found in the western part of the state, and is obtained by means of deep "wells" drilled into the solid rock. The production of this oil gives employment to many people.

The *oyster fisheries* on the shores of Chesapeake Bay, in Maryland, are a source of much wealth.

Ship-building is an important business, and many ships and steamboats are built on the shores of Delaware River and of Lake Erie. Many of these vessels are made of iron.

On the map is a small tract of land on the Maryland side of Potomac River, but separated from that state. It is the District of Columbia. Here, in the city of Washington, the capital of the United States, Congress meets to make laws for the nation, and the President and other chief officers of the government perform their duties.

[To be Recited.]

Name the chief occupations of the people of the Middle Atlantic States.

Agriculture, commerce, manufacturing, mining, oyster-fishing, and ship-building.

What city in the Union has the most commerce? New York.

Why has New York come to be so large and prosperous? Because it has a good harbor, and easy means of carrying on business with the interior of the country.

What are some of its means of carrying on business?
Hudson River, the Erie Canal, the Great Lakes, and numerous railroads.

Name other commercial ports in the State of New York. Brooklyn, Buffalo, Albany, Oswego, and Rochester.

What advantages for commerce has Pennsylvania?

It has Delaware River on the east, and Ohio River on the west, and it borders on Lake Erie. It has also numerous railroads.

Which are the chief commercial ports of Pennsylvania? Philadelphia, Pittsburgh, and Erie.

Which are the chief commercial ports of New Jersey? Jersey City, Hoboken, and Camden.

What is the chief commercial port of Maryland? Baltimore.

Name the chief manufacturing places of these states.

New York City, Buffalo, Rochester, and Troy, in the State of New York; Newark, Paterson, and Jersey City, in New Jersey; Philadelphia, Pittsburgh, and Reading, in Pennsylvania; Wilmington, in Delaware; and Baltimore, in Maryland.

For what is Pennsylvania most remarkable?

For the products of its mines of coal and iron. It is the chief mining state in the Union.

What other valuable product has Pennsylvania?

Petroleum.

Where are the oyster-fisheries?

On the shores of Chesapeake Bay, in Maryland.

Where is ship-building carried on?

On the shores of Delaware River and of Lake Erie.

What important city does the District of Columbia contain? Washington, the capital of the United States.

LESSON XXX.

QUESTIONS ON THE MAP OF THE SOUTH AT-LANTIC AND SOUTH CENTRAL STATES.

To be Recited.]

Which are the South Atlantic States? (Virginia, North Carolina, South Carolina, Carolina, Georgia, and Florida.) Which are the South Central States? (West Virginia, Kentucky, Tennessee, Alabama, and Mississippi.) What states are north of these two groups of states? What states are west? What state and what gulf are south? What ocean is east? Which of these states border on the Atlantic Ocean? Which border on the Gulf of Mexico? Which border on Mississippi River? Which border on Ohio River? Which border on the Potomac?

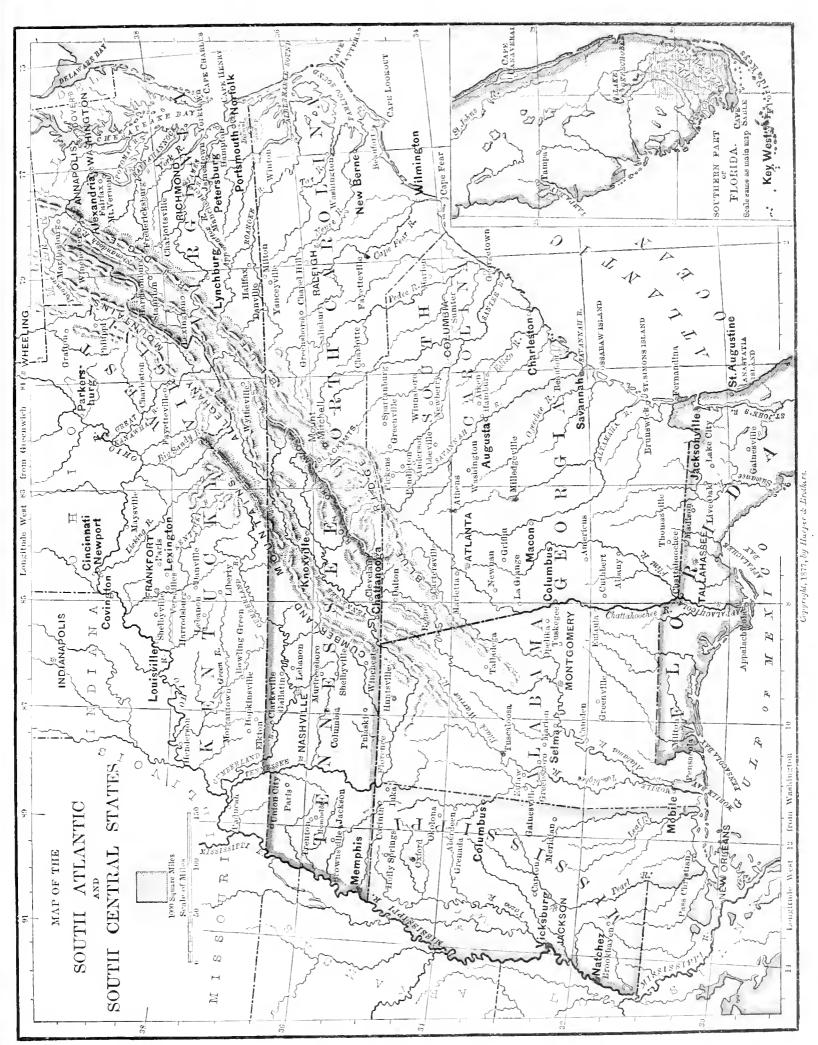
What range of mountains separates Virginia from West Virginia? What range separates Virginia from Kentucky? What range crosses Virginia, North Carolina, and Georgia? What range separates North Carolina from Tennessee? What two capes are on the coast of Virginia? What three capes are on the coast of North Carolina? What large bay is in the eastern part of Virginia? What two sounds are on the coast of North Carolina?

What river is between Virginia and Maryland? Into what does it flow? Name two rivers in the eastern part of Virginia. What river crosses the northeastern part of North Carolina? Which is the principal river of South Carolina? What river separates South Carolina from Georgia? Which is the principal river of Georgia? What river is in the northeastern part of Florida? What river is in the western part?

What branch of the Ohio is in West Virginia? What river in Tennessee crosses the northern part of Alabama and the western part of Kentucky? Name two other branches of the Ohio that are in Kentucky. What river is in the southern part of Alabama? Into what does it flow? What river forms the western boundary of Mississippi?

Name the capital of each of the South Atlantic States. What city in Virginia is near the mouth of James River? What city is south of Richmond? What city is in the southern part of North Carolina? What seaport is in South Carolina? What seaport is in Georgia? What town in Florida is near the mouth of St. Johns River?

Name the capital of each of the South Central States. What two commercial ports in Kentucky are on Ohio River? What city in Tennessee is on Mississippi River? What city is in the northeastern part of the state? What city in Alabama is on Mobile Bay? What two cities in Mississippi are on Mississippi River?



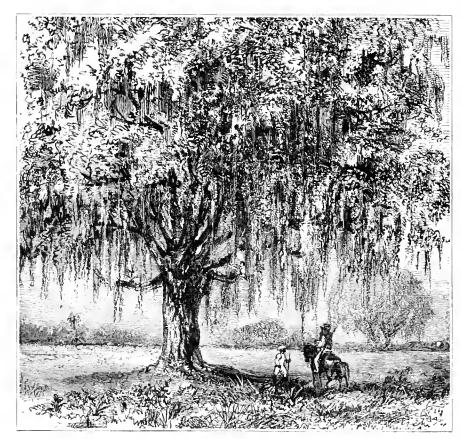
LESSON XXXI.

SOUTH ATLANTIC STATES.—HISTORY, SURFACE, ETC.

[To be Read.]

Our study now brings us very near to the Torrid Zone, the region of warmth and brightness and beauty. It brings us to that part of our country where oranges, bananas, figs, cotton, rice, and sugar-cane grow; where the alligator basks on the river-banks, and in the moist lowlands beautiful flowers load the air with perfume; and where the land is divided into great plantations, as they are called, instead of into small farms, as in the Middle Atlantic States and in New England.

The map before us includes two groups of states. The group which we are first to study consists of Virginia, North Carolina, South Carolina, Georgia, and Florida. These are called the "South Atlantic States," be-



LIVE-OAK.

cause they are all in the southern part of the country, and border on the Atlantic Ocean.

Virginia, the most northerly of this group, is one of the oldest of the states, and for that reason is sometimes called the "Old Dominion." The first permanent settlement in Virginia was made at Jamestown, in 1607. But the oldest town in the United States is St. Augustine [Saint Au-gus-teén], in Florida. It was settled by the Spaniards, in 1565.

South Carolina is often called the "Palmetto State," because the palmetto-tree, a kind of palm, abounds there.

Surface.—If we notice the position of the mountains in these states, we shall see that in Virginia they form three parallel ranges: the Blue Ridge, in the east; the Iron or Smoky Range, in the middle; and the Cumberland Mountains, in the west. Some of the summits of these ranges are very high, as, for instance, Mount Mitchell, in North Carolina. The mountain region in each state, except Virginia, is not very large. South Carolina

has but few mountains; and Florida has none. The southern part of Florida is supposed to rest on a great bed of coral.

Between the ridges of the mountains there are valleys, which are covered with vast forests of oak, chestnut, and maple.

A portion of the region between the mountains and the Atlantic Ocean, called the "Pine Barrens," is covered with forests of pine-trees; and in Georgia and Florida are immense forests of live-oak.

Productions.— The mountain region yields coal, iron, marble, and slate. From the Pine Barrens we get tar, pitch, turpentine, and lumber; and from the forests of Georgia and Florida the live-oak timber which is used in shipbuilding. But the chief products of

this group of states are tobacco, cotton, and rice, which are raised in large quantities.

The tobacco-plant is a native of this country. Sir Walter Raleigh learned about it from the Indians, and it was afterwards carried to England, where it soon came into use; and now tobacco is so generally used that it is one of the great staples of the United States.



GATHERING TURPENTINE.

Cotton is the most important staple of this group of states. It is the fruit of a shrubby plant, and grows in pods. As the seeds ripen, the white, dry, wool-like substance—called "raw" cotton—is formed; and finally the pods open, the fleecy contents burst forth, and are then ready to be picked. A busy time it is when the picking is going on.

After the cotton is picked, it is separated from its seeds by means of a machine called

a cotton-gin, and it is then pressed into bales and sent to market.

Then there is that excellent article of food, rice. This grain is not a native of America, but was brought from the East Indies, where it is the chief food of many millions of people. It can not be raised except in a few places; for it must be kept under water after it is first sown, and then the water must be drained away. It grows finely in the low, moist lands of the South Atlantic States.

The chief products of Virginia and North Carolina are wheat, corn, turpentine, tobacco, and sweet-potatoes; of South Carolina, cotton and rice; of Georgia, cotton, corn, and rice; and of Florida, cotton, and oranges, and other fruits that grow in warm countries.

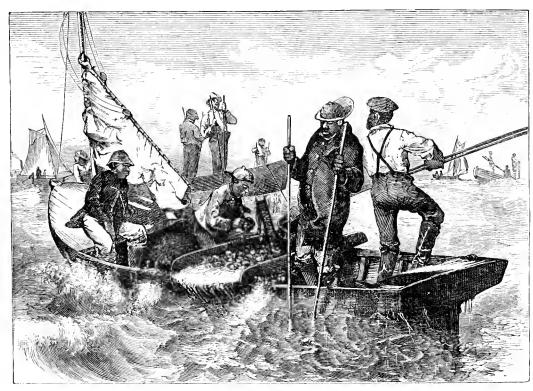
Occupations. — Most of the people in this group of states are engaged in agriculture. The great staples—tobacco, cotton, and rice—of which we have been speaking, are the chief sources of their wealth.

There are also many people employed in commerce. The productions of these states must be sent to other states and countries where they are to be used, and for this purpose commercial ports and shipping are needed. Norfolk, in Virginia; Charleston, in South Carolina; and Savannah, in Georgia, are the most important ports.

Other ports are Alexandria, Lynchburg, and Portsmouth, in Virginia; New Berne and Wilmington, in North Carolina; Macon, in Georgia; and Key West, in Florida.

Oyster-fishing on the shores of Chesapeake Bay, in Virginia, is an important business. Large quantities of oysters are shipped from the port of Norfolk for the supply of northern markets.

South of Chesapeake Bay there are few good harbors anywhere on the coast. The ocean, off Cape Hatteras, in North Carolina, is subject to violent storms, and many a wreck occurs on that dangerous cape.



OYSTER-FISHING.

A part of the people are engaged in manufacturing. Virginia and Georgia are fast increasing the amount of their manufactures; for in their mountains they have rich mines of iron ore and extensive water-power.

Richmond, in Virginia; and Augusta and Columbus, in Georgia, are important manufacturing cities.

Rivers.—The chief rivers of the South Atlantic States are the Potomac and the James, in Virginia; the Roanoke, in North Carolina; and the Savannah, between South Carolina and Georgia.

[To be Recited.]

Name the South Atlantic States.

Virginia, North Carolina, South Carolina, Georgia, and Florida.

Why are they so called?

Because they are in the southern part of our country, and border upon the Atlantic Ocean.

When and where was the first permanent settlement made in the United States?

In 1565, at St. Augustine, in Florida.

What three mountain ranges are in the South Atlantic States?

The Blue Ridge, the Iron or Smoky Range, and the Cumberland Mountains.

What is said of the southern part of Florida?

It is supposed to rest on a vast bed of coral.

What are the Pine Barrens?

They are a low, sandy tract of land covered with forests of pine-trees.

Name the mountain and forest products

Coal, iron, tar, pitch, turpentine, and lumber.

Name the three great agricultural products of this group of states.

Tobacco, cotton, and rice.

Of what country is tobacco a native?

The United States.

What is said of the cotton crop?

It is the most valuable and important agricultural product of this group of states.

From what region was rice first brought to America?

From the East Indies, where it is the chief food of millions of people.

Name other products of these states.

Wheat, corn, and oranges, bananas, figs, and other fruits that grow in warm countries.

What is the principal occupation of the people of the South Atlantic States?

Agriculture.

Which are the chief commercial ports?

Norfolk, in Virginia; Charleston, in South Carolina; and Savannah, in Georgia.

Which are the chief manufacturing places?

Richmond, in Virginia; and Augusta and Columbus, in Georgia.

Which are the chief rivers of the South Atlantic States?

The Potomac and the James, in Virginia; the Roanoke, in North Carolina; and the Savannah, between South Carolina and Georgia.

LESSON XXXII.

SOUTH CENTRAL STATES.—SURFACE, CLIMATE, PRODUCTIONS, ETC.

[To be Read.]

Now we cross the Appalachian system of mountains, and come upon the slopes and levels of the Great Central Plain—the basin of the mighty Mississippi. The group of states we are to study consists of West Virginia, Kentucky, Tennessee, Alabama, and

Mississippi. These are called the "South Central States," because they are in the southern portion of the Central Plain.

All these states, except West Virginia, have Indian names; and each name has a meaning. Thus, the word "Mississippi" is taken from the name of the great river, which means "Father of Waters;" and the word "Tennessee" is taken from the name of the river Tennessee, which means "Great Bend."

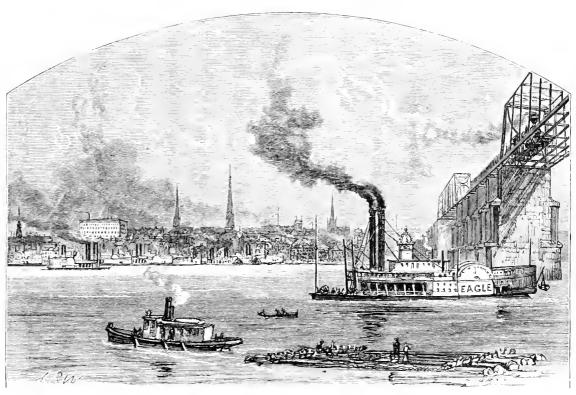
Alabama and Missis-

sippi are sometimes called "Gulf" States, because they border on the Gulf of Mexico.

Many interesting stories might be told about the settlement of these states. In Kentucky, for instance, the Indians fought the first settlers so fiercely, and so much blood was shed, that the state was called the "Dark and Bloody Ground."

Productions.—We already know that farmers raise what is best suited to the soil and climate where they live, and what they will have good chances to sell. Now, in West

Virginia, the eastern part of Kentucky and Tennessee, and the northern part of Alabama, the land is mountainous or hilly, the climate is temperate, and there is abundance of excellent grass; so, as there are millions of people living not far away who need beef and wool and horses, the people in this region are occupied chiefly with stock-raising—that is, raising cattle, sheep, and horses. The rest of the surface of these states is level, as well as fertile, while the climate is hot; and on these level lands in Kentucky large quantities of tobacco, hemp, and corn are raised; and in



VIEW OF LOUISVILLE.

Tennessee, Alabama, and Mississippi, cotton and corn. Mississippi raises the largest cotton crop of any state in the Union.

What means have the people of these states to send their products to market? They can send them by means of the Ohio and Mississippi Rivers, which flow along their entire western border. In addition, the Kentucky, Cumberland, Tennessee, and Alabama Rivers are navigable for long distances into the interior. There are also numerous railways. Thus they have excellent means for

commerce; and there are several important commercial ports: these are Wheeling, in West Virginia; Louisville, Covington [Cúving-ton], and Newport, in Kentucky; Nashville and Memphis, in Tennessee; Mobile [Mo-béel], in Alabama; and Columbus, in Mississippi. Louisville, beautifully situated on Ohio River, is the largest city in the South Central States.

Other important places are Parkersburg, in West Virginia; Lexington, in Kentucky; Chattanooga, in Tennessee; and Selma, in Alabama.

[To be Recited.]

Name the South Central States.

West Virginia, Kentucky, Tennessee, Alabama, and Mississippi.

Why are they so called?

Because they are in the southern portion of the Great Central Plain.

Why are Alabama and Mississippi called "Gulf" States? Because they border on the Gulf of Mexico.

What are the surface and climate of this group of states?

In the eastern part the land is mountainous or hilly, and the climate is temperate. The rest of the surface is very level and fertile, and the climate is hot.

What are the chief productions?

Cattle, sheep, horses, tobacco, hemp, cotton, and corn.

Which state raises the largest cotton crop? Mississippi.

What means for commerce have these states?

There are many navigable rivers—the Ohio, Mississippi, Kentucky, Cumberland, Tennessee, and Alabama—and many railroads.

Which are the chief commercial ports?

Wheeling, in West Virginia; Louisville, Covington, and Newport, in Kentucky; Nashville and Memphis, in Tennessee; Mobile, in Alabama; and Columbus, in Mississippi.

What is said of Louisville?

It is the largest city in the South Central States.

LESSON XXXIII.

QUESTIONS ON THE MAP OF THE NORTH CENTRAL STATES.

[To be Recited.]

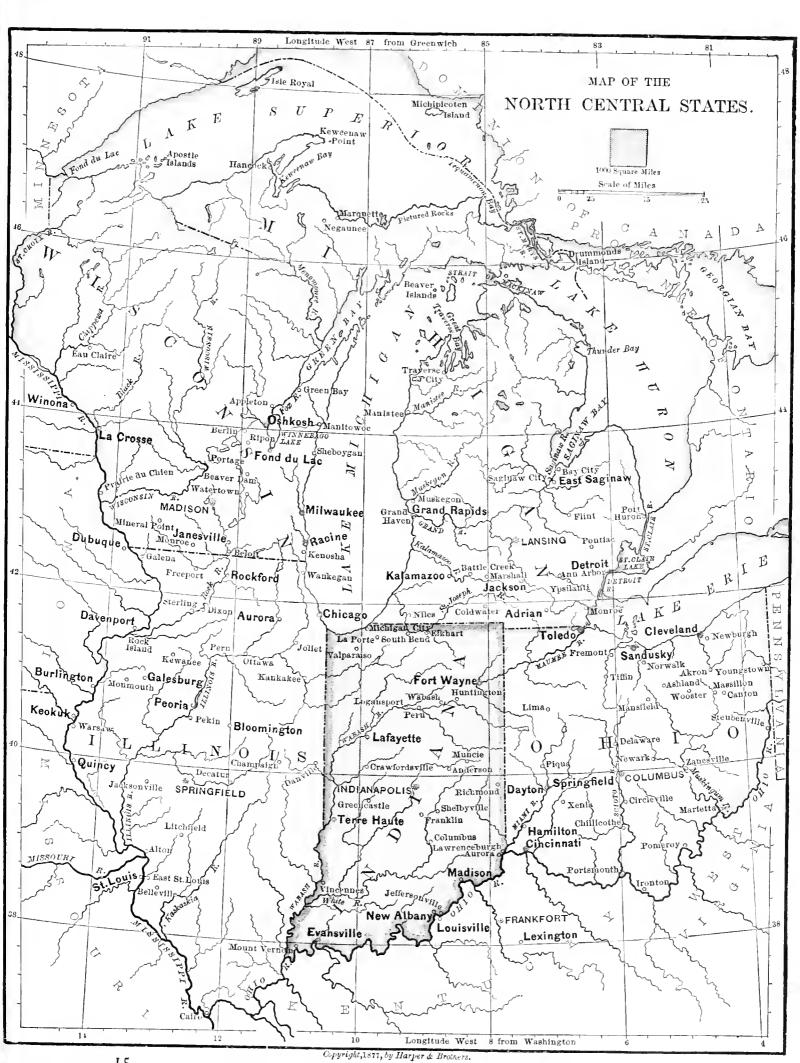
Name the North Central States. (Ohio, Indiana, Illinois, IVisconsin, and Michigan.) What are these states sometimes called? (The Lake States.) What country is north of this group of states? What province and states are east? What states are south? What states are west?

Which of these states consists of two peninsulas? What two lakes separate these peninsulas? What strait connects Lake Michigan with Lake Huron? What lake separates the northern peninsula from the Dominion of Canada? What lake separates the southern peninsula from Wisconsin and Illinois? What three lakes are east of the southern peninsula? What bay is in the eastern part of Michigan? What lake and what bay are in the northeastern part of Wisconsin?

What river forms the southern boundary of Ohio, Indiana, and Illinois? Name two rivers in Ohio that flow into Ohio River. What one flows into Lake Erie? What river forms part of the boundary between Indiana and Illinois? What two rivers form the western boundary of this group of states? What is the chief river of Illinois? What is the chief river of Wisconsin? What is the chief river of Michigan? What river connects Lake Superior with Lake Huron? What river connects Lake Huron with Lake St. Clair? What one connects Lake St. Clair with Lake Erie?

What is the capital of Ohio? What city is on Ohio River? What city is nearly west of Columbus? What city is on Maumce River? What two cities are on Lake Erie? What is the capital of Indiana? What city is in the southwestern part of Indiana, on Ohio River? Name one city on Wabash River. What city is in the northeastern part of the state?

What is the capital of Illinois? What city in Illinois is on Lake Michigan? What city is on Illinois River? What city is on the Mississippi? What is the capital of Wisconsin? What two cities in Wisconsin are on Lake Michigan? What two cities are on Winnebago Lake? What is the capital of Michigan? On what river is it? What two other cities are on Grand River? What city is on Detroit River?



LESSON XXXIV.

NORTH CENTRAL STATES. — HISTORY, SURFACE, ETC.

[To be Read.]

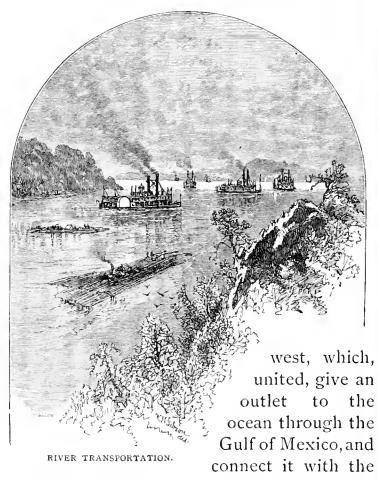
The group of states we are now to study consists of Ohio, Indiana, Illinois, Wisconsin, and Michigan. They are called the "North Central States," because they are in the northern part of the Great Central Plain. They are also called "Lake States," because they border on the Great Lakes.

This is a very remarkable group. Less than a hundred years ago there was hardly a log hut in all its extent. The noble old forests in the northern part had never heard the sound of the settler's axe, and in the southern part the tall grass waved over the lonely prairies. Now everywhere is busy life. There are many great cities that are the centres of trade and commerce; vast tracts of forest have given place to thriving settlements, and from the cultivated prairies comes the grain that supplies more than half the land.

It is easy to understand why these states have grown so rapidly. In the first place, they have a deep and wonderfully rich soil; for most of their surface consists of prairie lands, and of the different kinds of plains none are so fertile as the prairies. And, besides, they have a good climate; for though the winters are long and severe in the north, the summers are hot, and as much rain falls as is needful. For these reasons this group of states is one of the best regions in the world for agriculture. The prairies reach from the western part of Ohio entirely across the States of Indiana and Illinois, and from the Ohio River on the south to the middle of the States of Michigan and Wisconsin on the north. In the northern part of Michigan and

Wisconsin are great forests of pine and other kinds of trees, which are a source of much wealth. The mines of these states are also among the richest in the world.

But this fruitful soil, these vast forests, and these rich mines would be of little value if it were not for easy ways to carry their products to market. Besides the navigable rivers in the interior, this group of states has the Ohio on the south and the Mississippi on the



whole interior of the continent; and it has the Great Lakes on the north, through which its products can be carried to the Atlantic States and the countries beyond the Atlantic Ocean. It has railroads also running in every direction.

The history of Cincinnati [Cin-cin-náh-ti], the metropolis and chief commercial port of Ohio, is quite remarkable. At the beginning of this century it was a small village of seven hundred and fifty inhabitants. Now it contains more than two hundred thousand in-

habitants. It has a large commerce, does an immense business in porkpacking, and is one of the principal manufacturing cities in the United States. As it was for many years the largest city west of the Appalachian Mountains, it obtained the name of the "Queen City of the West."

The history of Chicago [Shi-cáw-go], the me-

tropolis of the Lake States, is even more remarkable. No other city in the United States has had so rapid a growth. Forty years ago it was only a village of twelve houses, on the muddy banks of a little river flowing into Lake Michigan; now it has four hundred thousand inhabitants, and some of the grandest streets and buildings on the continent. It is the chief lumber and pork market in the United States, and one of the largest grain and cattle markets in the world.

Detroit, the chief commercial port of Michigan, is the oldest city in the United States west of the Appalachian Mountains. It is even older than Baltimore or Philadelphia, for a trading-post was established there by the French in 1670. Admirably situated for commerce, midway of the Great Lakes, and connected by many railroads with the interior of the country, it has a large business, and is rapidly growing.

Milwaukee, the largest city and lake port of Wisconsin, is pleasantly situated on the western shore of Lake Michigan, and has one of the finest harbors on the Great Lakes. It is an important grain and lumber market, and its business and population are fast increasing.

Toledo, Sandusky, and Cleveland, in Ohio, and Racine, in Wisconsin, are also important



lake ports; and Evansville, New Albany, and Madison, in Indiana, and Quincy, in

HARVESTING CORN.

Illinois, are important ports on the Ohio and the Mississippi. Other commercial ports are Peoria, in Illinois, and Grand Rapids, in Michigan.

Formerly, only those places grew rapidly that were situated near the ocean or some other large body of water, such as a sea, lake, or navigable river. Indianapolis, the capital of Indiana, is an example of the way in which railroads are building up large cities. Instead of water-ways, it has railways branching from it in every direction, and by means of these it carries on an immense business. Dayton, in Ohio; Fort Wayne and Terre Haute [Tér-re-hote], in Indiana; and Bloomington, in Illinois, are also important railroad centres—that is, places where several railroads meet.

Productions.—This group of states, as we have already learned, has a good climate and a fertile soil. So a large number of the people who live here are engaged in *farming*. It has vast forests, too, which abound in valu-

able timber. So a great many of the inhabitants are engaged in *lumbering*. What are the chief productions?

Wheat, corn, wool, and live-stock—that is, cattle, sheep, and horses—are the staples of the fertile prairie lands, and immense quanti-



and lumber, and Indiana raises fine crops of all the staples of the region.

The mines of these states yield great quantities of valuable metals and of coal. Ohio has beds of iron and coal; Indiana and Illinois, of coal; Wisconsin, of lead and iron; and Michigan, of copper, iron, and coal.

Manufactures.—Of the wheat that is raised in this group of states a great deal is made into flour; so there are many flour-mills here.

The hogs must be put into convenient forms to be carried to market; so there are many pork-packing establishments, where the slaughtered hogs are turned into pork, bacon, hams, and lard. The forest-trees must be changed into lumber; so there are many saw-mills. The iron and the copper ores must be smelted—that is, melted in such a way as to make them pure—and there are furnaces for that. There are also other manufactures of almost every description.

Cincinnati, Cleveland, Dayton, Indianapolis, Quincy, Detroit, and Milwaukee are the chief manufacturing cities.

In addition to the commercial, manufacturing, and railroad centres that have been named, Springfield and Hamilton, in Ohio; Lafayette, in Indiana; Aurora, Galesburg, and Rockford, in Illinois; Oshkosh, Fond du Lac, and La Crosse, in Wisconsin; and Jackson, East Saginaw, Kalamazoo, and Adrian, in Michigan, are important places.

Rivers.— The chief rivers are the Scioto, Maumee [Maw-mée], and Miami [Mi-ám-i], in Ohio; the Wabash, in Indiana; the Illinois, in Illinois; the Wisconsin, in Wisconsin; and the Grand and the Detroit, in Michigan.

[To be Recited.]

Name the North Central States.

Ohio, Indiana, Illinois, Wisconsin, and Michigan.

Why are they so called?

Because they are in the northern part of the Great Central Plain.

What is said of their surface and soil?

Most of their surface consists of prairie lands; and the soil is deep, and very rich.

What kind of climate have these states?

The winters are long and severe in the north, but the summers are hot. As much rain falls as is needful.

What advantages for commerce have these states?

They have the Ohio on the south, the Mississippi on the west, the Great Lakes on the north, and many navigable rivers in the interior. The railroads are also very numerous.

What is said of Cincinnati?

It is the chief commercial port of Ohio, and has a population of more than two hundred thousand.

What is said of Chicago?

Forty years ago it was a village of twelve houses; now it has four hundred thousand inhabitants. It is the chief lumber and pork market of the country, and one of the greatest grain and cattle markets in the world.

Which are the chief lake ports?

Toledo and Cleveland, in Ohio; Detroit, in Michigan; Milwaukee, in Wisconsin; and Chicago, in Illinois.

Which are the chief river ports?

Cincinnati, in Ohio; Evansville, in Indiana; Quincy and Peoria, in Illinois; and Grand Rapids, in Michigan.

Name some of the railroad centres.

Dayton, in Ohio; Indianapolis and Fort Wayne, in Indiana; and Bloomington, in Illinois.

What are the chief productions of these states?

On the prairies, wheat, corn, wool, and livestock are the staples. Michigan and Wisconsin produce a great deal of lumber.

What are the products of the mines?

Coal and iron, in Ohio; coal, in Indiana and Illinois; lead and iron, in Wisconsin; and copper, iron, and coal, in Michigan.

What are the chief manufactories?

Flour-mills, to change the wheat into flour; saw-mills, to cut the trees into lumber; pork-packing establishments, to turn the hogs into pork, lard, hams, and bacon; and smelting-furnaces, to separate the metals from the ores.

Which are the chief manufacturing cities?

Chicago, Indianapolis, Cincinnati, Detroit, Milwaukee, Cleveland, Dayton, and Quincy.

Which are the most important rivers?

The Scioto and Maumee, in Ohio; the Wabash, in Indiana; the Illinois, in Illinois; the Wisconsin, in Wisconsin; and the Grand, in Michigan.

LESSON XXXV. QUESTIONS FOR REVIEW.

[To be Recited.]

By what nations of Europe was the United States settled? Into whose hands did all these settlements fall? What were these settlements called at that time? What is a colony? How long ago did the colonies become "free and independent states?" Give the names of the thirteen original states. Where were they situated? How and by whom was the Great Central Plain settled? How did California come to be settled? How many inhabitants were there in the United States at the time of the Revolution? How many are there now? What is said of the means of travel? What is said of the manufactories?

Name the North Atlantic States. Describe the surface of these states. Describe the soil. Describe the climate. What are the chief occupations of the people? What advantages for manufacturing have these states? What advantages for commerce? What advantages for lumbering and shipbuilding? Which is the largest city in these states?

Name the Middle Atlantic States. Describe their surface. Describe their soil. What is said of their climate? What are the chief occupations of the people? What are the chief agricultural products? What advantages for commerce has New York City? What advantages for commerce has the State of Pennsylvania? For what is Pennsylvania most remarkable? Which are the two largest cities in the Middle Atlantic States?

Name the South Atlantic States. Describe their surface. What is the chief occupation of the people? What are the chief agricultural products? Name other productions.

Name the South Central States. Describe their surface. Describe their climate. What is the chief occupation of the people? What are the chief productions? Which is the largest city in these states?

Name the North Central States. For what are they remarkable? Why have they grown so rapidly? Name the five largest cities in these states. What are the chief products of the prairie regions? What is the chief product of the forests? What are the chief products of the mines?

LESSON XXXVI.

QUESTIONS ON THE MAP.

[To be Recited.]

Which are the West Central States? (Minnesota, Iowa, Missouri, Arkansas, and Louisiana.) Which are the States of the Plains? (Dakota Territory, Nebraska, Kansas, Indian Territory, and Texas.)

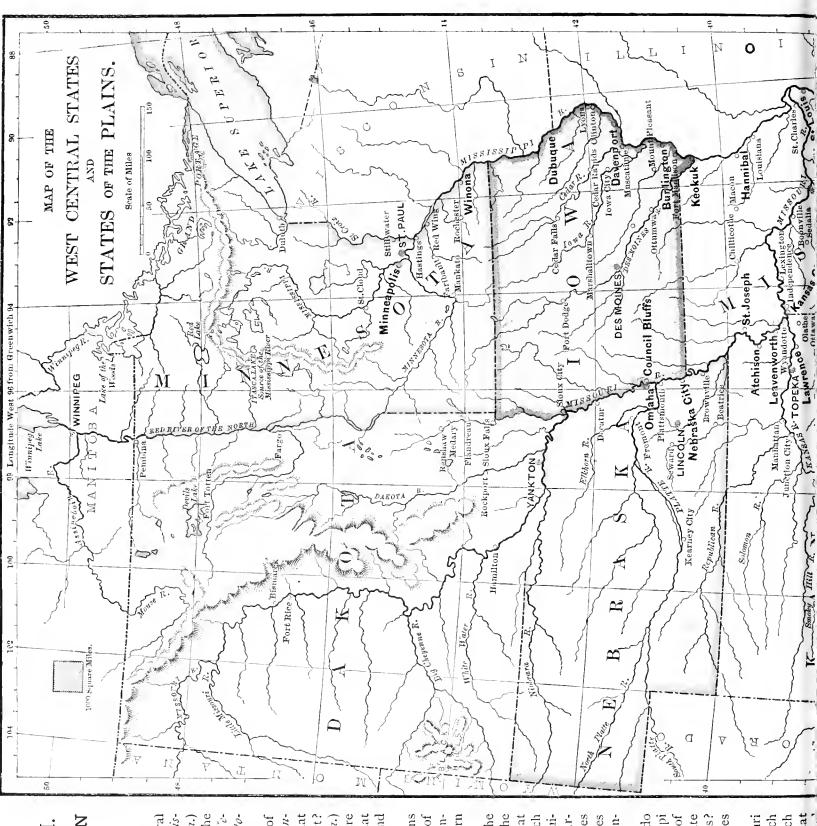
What province is north of these groups of states? (Manitoba [Man-i-to-bah].) Of what country is this province a part? (The Dominion of Canada.) What lake and what states are east? What country and what gulf are south? What state and what territories are west?

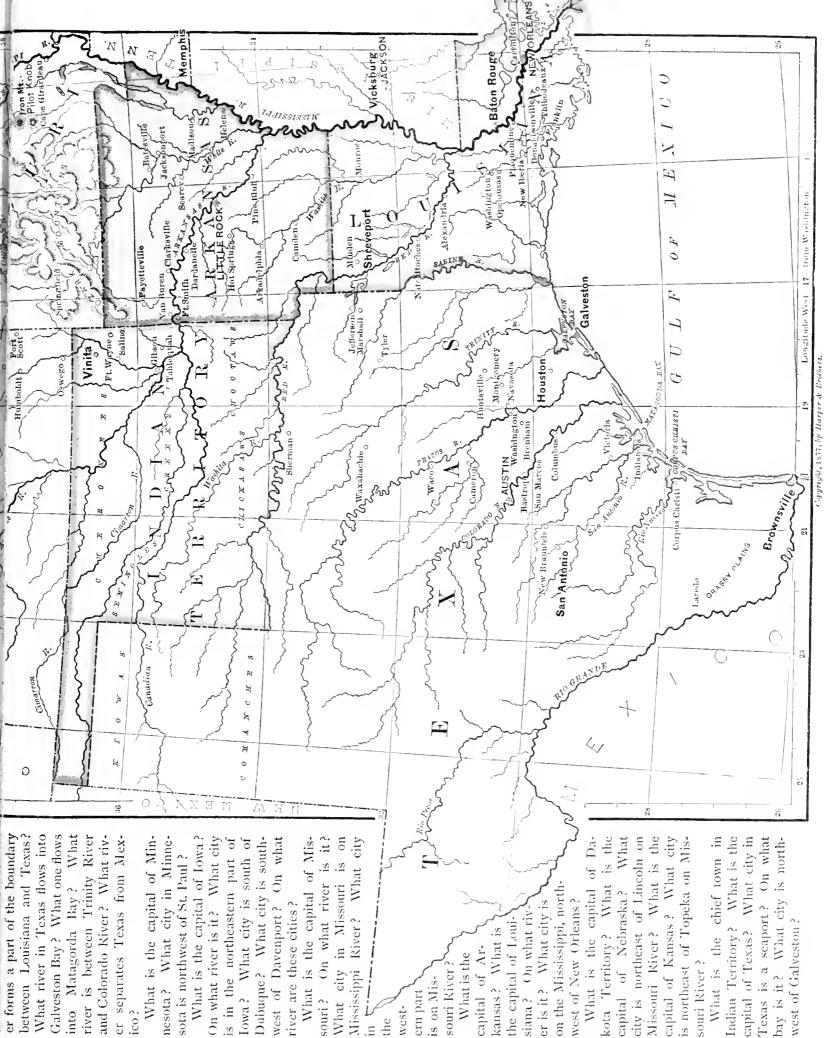
What range of mountains is in the southwestern part of Missouri? What two mountains are in the southeastern part?

What river forms nearly the entire eastern boundary of the West Central States? In what lake does it rise? What branch of the Mississippi crosses Louisiana? What branch crosses Arkansas? What branch crosses Missouri? What one crosses Iowa? What one crosses Iowa? What one crosses lowa?

In what general direction do the branches of the Mississippi flow? Which is the largest of these branches? What state and what territory does it cross? Between what two states does it flow?

What branch of the Missouri crosses Kansas? What branch crosses Nebraska? What branch is in Dakota Territory? What





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Indian Territory? What is the capital of Texas? What city in Texas is a scaport? On what chief town in What city is northwest of Galveston? What is the

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LESSON XXXVII.

WEST CENTRAL STATES.—SURFACE, CLIMATE, ETC.

[To be Read.]

We will now cross the Mississippi River and study the "West Central States." They are Minnesota, Iowa, Missouri, Arkansas, and Louisiana, and are called the West Central States because they are in the western part of the Great Central Plain.

These five states extend from the northern

differences of climate, and the products will also differ. Minnesota, like Wisconsin and Michigan, which lie east of it, has short summers, and long, cold winters; while Louisiana, like Mississippi and Florida, has almost the climate of the Torrid Zone. Wheat and corn are the great staples in Minnesota and in the prairie region of Iowa and Missouri; while cotton and corn are the chief products in Arkansas and Louisiana. Louisiana also produces fine crops of sugar and rice.

Stock-raising is carried on extensively in most of these states; and the forests of Minnesota abound in valuable timber.

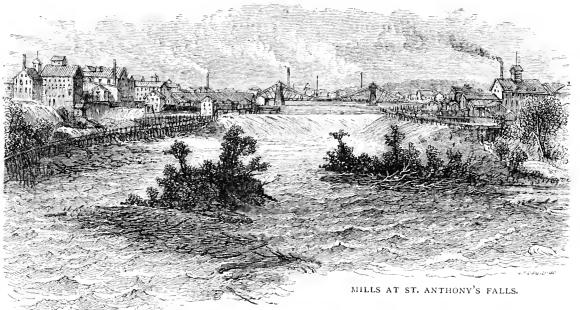
Most of these states have great mineral wealth. Iowa has rich mines of coal and lead; Missouri and Arkansas, of coal, lead, and iron. In the southern part of Louisiana there is a vein of pure rock-salt of great value.

South of St. Louis, in Missouri, are "Iron Mountain" and "Pilot Knob," which are mountains wholly composed

of iron ore, enough to supply a vast region for hundreds of years.

Manufactures.—In Minneapolis, at the Falls of St. Anthony [Saint An'-to-ny], on the Mississippi, immense quantities of flour and lumber are produced; and St. Louis, in Missouri, is noted for the extent and value of its manufactures. Indeed, manufacturing establishments are springing up in all parts of this active and prosperous region.

Commerce.—The navigable rivers of these states give them excellent means for commerce. Mississippi River forms their eastern border for more than a thousand miles, and large branches of that great water-way



limit of the United States to the Gulf of Mexico, a distance of nearly fifteen hun-

dred miles. The great Mississippi River forms the entire eastern boundary of three of them, and part of the eastern boundary of the other two.

Surface.—The only mountains in all this region are the Ozark, in Missouri. The surface consists mostly of extensive prairies in the northern half, and of low, level tracts in the southern half. The soil is very fertile.

Climate and Productions.—A very long belt of territory like this will, of course, have great

flow through or near them. Missouri River bounds Iowa on the west, and flows through Missouri; Arkansas River crosses Arkansas; and the Red River of Louisiana is navigable to the western limit of the state.

St. Louis is the chief city of Missouri, and the metropolis of the Mississippi Valley. It is situated near the junction of the Mississippi and the Missouri Rivers, the former navigable for more than seven hundred miles to the northward, and the latter for two thousand five hundred miles to the foot of the Rocky Mountains. By means of the Ohio, this city

communicates with the rich states on that river; and by means of the Mississippi, with the Gulf of Mexico and the Atlantic Ocean.

On these water-ways and on numerous railways great quantities of products are brought to St. Louis from every quarter of the Mississippi Valley, and from foreign countries, to be sent to other places where they may be needed.

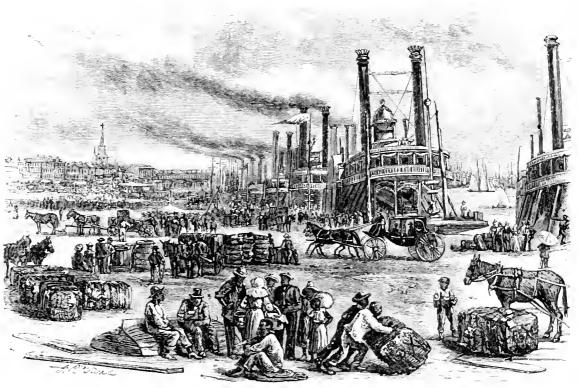
New Orleans, the capital and chief city of Louisiana, is another

great commercial port of these states. It is the largest city in all the southern section of our country, and the largest cotton port in the world. Hundreds of steamboats constantly line its levees, either discharging or taking in cargoes.

"Line its *levees*!" What is meant by that? Why do we not say, "Line its wharves" or its "piers," as we would if we were speaking of New York, or Philadelphia, or Baltimore, or Chicago? This is the reason:

The city of New Orleans, although it is a hundred miles from the mouth of the Mississippi, is built where, a very long time ago, there was no dry land whatever, but the whole surface was covered by the waters of the Gulf of Mexico. The land between the city and the mouth of the river, and for sixty miles still farther inland, has been slowly formed out of earth that the river has washed from its banks and brought from a long distance.

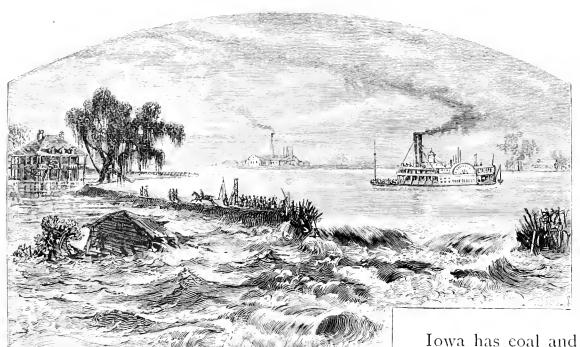
The land thus formed is not so high above the bed of the river but that, whenever the river is swollen, the neighboring country would



SCENE IN NEW ORLEANS.

be flooded if there were not something to prevent it. So the inhabitants have built wide embankments along the borders of the river: these embankments are called *levees*.

Very often the water of the river is much above the ground on which the city is built, and would sweep over it, bringing ruin in its track, if it were not for the levees. Sometimes the levees above the city—for they are too careful to let such a thing happen in the city itself—become weakened, the high wa-



CREVASSE ON THE MISSISSIPPI.

ter breaks through them, and pours down on the plantations, destroying the crops, drowning the eattle, and perhaps drowning some of the inhabitants too. Such a break is called a *crevasse*.

New Orleans is built on a bend of the Mississippi in the form of a crescent (that is, the form of the new moon), and on that account is sometimes called the "Crescent City."

The chief commercial ports of these states, besides St. Louis and New Orleans, are St. Paul, Winona, Dubuque [Du-boók], Davenport, Burlington, Keokuk, and Hannibal, on the Mississippi; Council Bluffs, St. Joseph, and Kansas City, on the Missouri; and Shreveport, on Red River, in Louisiana.

[To be Recited.]

Name the West Central States.

Minnesota, Iowa, Missouri, Arkansas, and Louisiana.

Why are they so called?

Because they are in the western part of the Great Central Plain.

What is said of the surface of these states?

It consists mostly of prairie lands in the north, and low, level tracts in the south.

What are the staple productions?

Corn and wheat, on the prairie lands; eorn, eotton, sugar, and rice, on the low level tracts in the south.

What minerals have these states?

Iowa has coal and lead; Missouri and Arkansas, coal, lead, and iron; and Louisiana, rock-salt.

What noted masses of iron ore are in Missouri?

Iron Mountain and Pilot Knob.

What are the two most noted manufacturing places?

Minneapolis, in Minnesota; and St. Louis, in Missouri.

What advantages have these states for commerce?

They have many navigable rivers, the chief of which are the Mississippi, the Missouri, the Arkansas, and the Red.

What is said of St. Louis?

It is the chief city of Missouri, and the metropolis of the Mississippi Valley.

What is said of New Orleans?

It is the chief commercial city of Louisiana, and the largest cotton port in the world.

How is it built?

It is built below the level of high water in the river, and is protected by banks called levees.

What sometimes happens to these levees?

The high water breaks through them, and causes great destruction of life and property.

What is such a break called?

A crevasse.

LESSON XXXVIII.

STATES OF THE PLAINS.—CLIMATE, PRODUCTIONS, ETC.

[To be Read.]

The belt of states and territories that we are now to study lies between the West Central States and the foot of the Rocky Mountains. The surface rises gradually from the prairies and the low, level tracts to the mountains, and the region has long been known in that part of the country as the "Plains." So we call this belt the "States of the Plains."

They include Dakota Territory, Indian Territory, and the states of Nebraska, Kansas, and Texas.

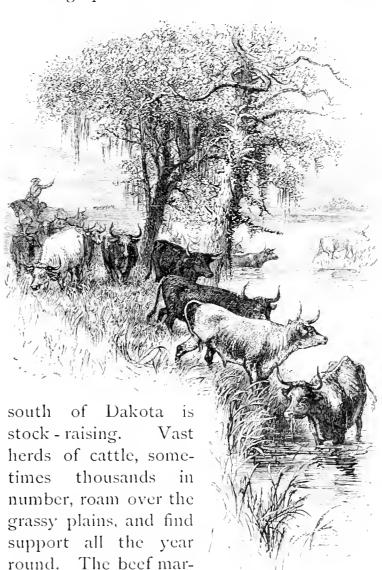
Thus far, in our study, we have had to do only with states; but since there are now territories also to be studied, we must explain what a territory is.

We have learned that a state is a portion of the country whose people, while they are under the general government at Washington, have also a government of their own; have a Governor whom they elect, and a Legislature, also elected by them, that makes laws for them; but in the newly settled parts of the country, where there are few inhabitants, the general government appoints the Governor and some other officers, and assists in making the laws and keeping order. As long as the people anywhere are thus helped by the general government, their land is called a "territory." A great many of the states were thus territories at first; and there are at this time ten territories.

Climate and Productions.—Like the West Central States, the States of the Plains form a belt extending from the northern to the southern boundary of the United States; and have therefore great differences of climate. In Dakota, which is farthest north, fur, taken

from animals that live only in very cold regions, is one of the products; but in Texas, besides corn and wheat, the staples of the Torrid Zone, such as cotton, rice, sugar, oranges, and the like, are raised. On the prairie lands of Kansas and Nebraska much wheat and corn are produced.

A large part of the business of these states



part from these herds. The stock-farms in Texas are called *ranches*.

kets of the north and

east are supplied in

Rivers.—The largest rivers are the Missouri, which flows through Dakota and along the borders of Nebraska and Kansas, navigable all the way; the Platte, a branch of the Missouri in Nebraska; and the Kansas, another branch of the Missouri, in Kansas.

Chief Cities and Towns.—The chief cities and towns in this belt of states are Omaha and Nebraska City, in Nebraska; Leavenworth, Atchison, Topeka, and Lawrence, in Kansas; and Galveston, Houston, San Antonio, and Brownsville, in Texas. Leavenworth, the largest city in Kansas, is an important centre of trade. Galveston and Brownsville are the chief commercial ports of Texas. The latter has a large trade with Mexico.

Indians.—In this part of our country there are roving tribes of uncivilized Indians, some of whom are fierce and quarrelsome, and fond of war and bloodshed. Indian Territory is inhabited by peaceful and partly civilized Indians, who cultivate the soil, and have homes and schools.

[To be Recited.]

Name the States of the Plains.

The states of Nebraska, Kansas, and Texas, Dakota Territory, and Indian Territory.

What is a territory?

It is a newly settled part of the country, where there are so few inhabitants that the general government at Washington appoints some of its officers, and assists in its government.

What is said of the extent and climate of these states?

They extend from the northern to the southern boundary of the United States, and have, therefore, great differences of climate.

What are the chief productions?

Wheat, corn, cotton, rice, sugar, and cattle.

Which are the largest rivers?

The Missouri, the Platte, and the Kansas.

Name the most important places in this belt of states.

Omaha, in Nebraska; Leavenworth, in Kansas; and Galveston, in Texas.

Who inhabit Indian Territory?

Peaceful Indians, who cultivate the soil, and have homes and schools.

LESSON XXXIX.

QUESTIONS ON THE MAP OF THE WESTERN OR HIGHLAND STATES.

[To be Recited.]

Name the divisions of the Western or Highland States. (Rocky Mountain Division, Basin Division, and Pacific Division.) What does the Rocky Mountain Division include? (It includes the State of Colorado, and the Territories of Montana, Wyoming, and New Mexico.) What does the Basin Division include? (It includes the State of Nevada, and the Territories of Idaho, Utah, and Arizona.) What does the Pacific Division include? (It includes the State of Oregon, the State of California, Washington Territory, and Alaska.) Where is Alaska? (See map of North America.) What country is north of the Western or Highland States? What states are east? What country and what state are south? What ocean is west?

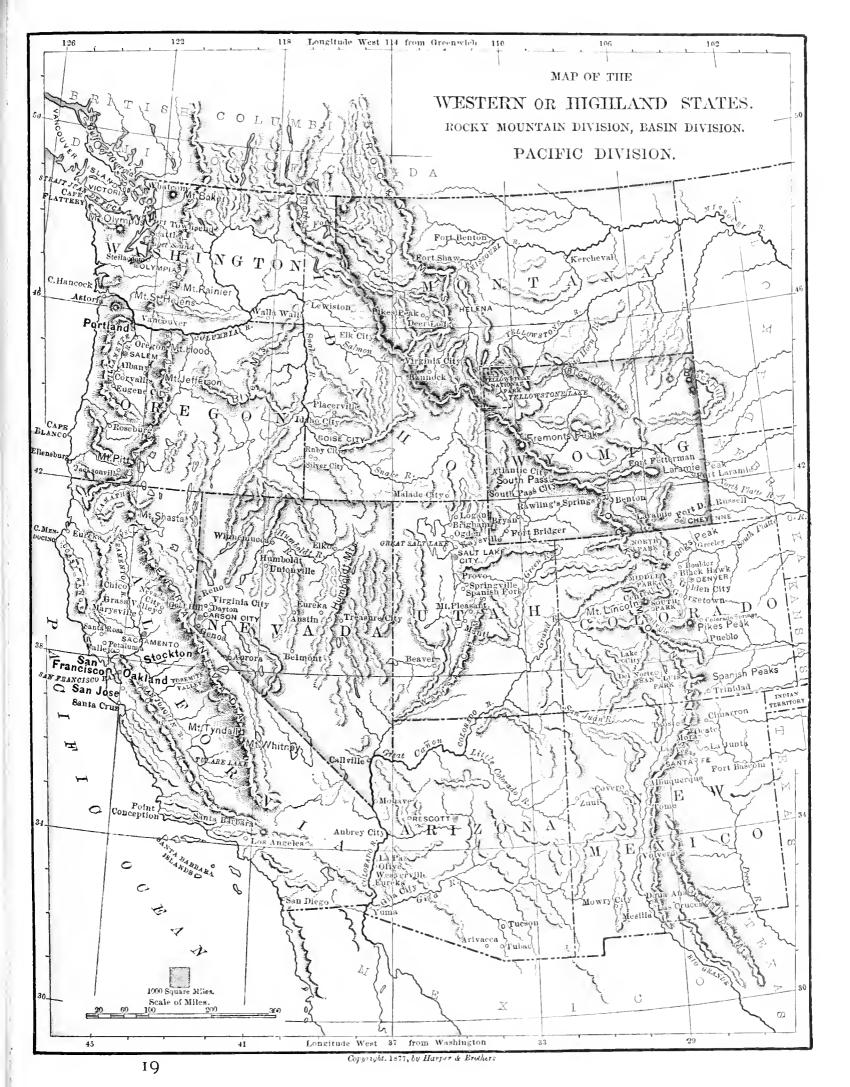
What mountain system extends the entire length of the Rocky Mountain Division? What range of mountains is in Utah? What ranges of mountains in the Pacific Division are

near the sea-coast? What range extends the entire length of California? What range crosses Washington Territory and Oregon?

What bay is on the west coast of California? What lake is near the centre of the state? What strait separates Washington Territory from Vancouver Island? What lake is in the northwestern part of Wyoming Territory? What large lake is in Utah?

What river is in the northern part of Montana Territory? In what mountains does it rise? What branch does it receive from the south? What river crosses New Mexico from north to south? What river separates Arizona from California? What river is in the northern part of California? What ranges of mountains does it separate? What two rivers in California flow into San Francisco Bay? What river forms part of the boundary between Oregon and Washington Territory? What branch does it receive from the south?

Name the capital of each of the Rocky Mountain States. Name the capital of each of the Basin States. Name the capital of each of the Pacific States. What city in Oregon is northeast of Salem? Name two cities in California on San Francisco Bay? What city is nearly south of Sacramento? What city is nearly south of Oakland? What noted valley is in the central part of California? What park is in the northwestern part of Wyoming Territory?



LESSON XL.

WESTERN OR HIGHLAND STATES: ROCKY MOUNTAIN DIVISION.—SURFACE, PRODUCTIONS, ETC.

[To be Read.]

West of the States of the Plains is a large group of states, called the "Western or Highland States." They are so called because they

are in the extreme western part of the country, and because the land here is much higher than it is in the Atlantic States and the States of the Great Central Plain. This group of states consists of three belts or divisionsthe "Rocky Mountain Division," the "Basin Division," and the "Pacific Division." The Rocky Mountain Division includes the State of Colorado [Col-o-ráh-do], and the Territories of Montana [Montáh-na], Wyoming [Wy-óming], and New Mexico.

Thus far in our study of the United States, the most remarkable accounts that have been given us have been of what man has done—how he has cut down forests, built

cities and towns, started manufactories, dug canals, built steamboats and railroads, and made a great nation. The things we are now to learn about are of a very different kind. Here are the wonders of nature. Here are mountains of tremendous height; here are geysers, or hot springs, throwing boiling water hundreds of feet into the air; here are deep gorges among the hills, worn by streams of water, and called *cañons* [kán-

yons], whose perpendicular rock walls, from two to three thousand feet high, are awful to behold. Here, also, are lakes and water-falls remarkable for beauty, and vast rocks worn into the most singular forms.

Most of this remarkable scenery is found among the Rocky Mountains. In Colorado, one can see from the lofty summit of Mount Lincoln hundreds of peaks, some of which are more than fourteen thousand feet high. Up among these peaks, and surrounded by them,

like vast mountain walls, there are four plains, some of them as large as the State of New Jersey. We should expect such high plains to be dreadfully cold and barren; but these have a delightful climate and a fertile soil, covered with grass and flowers. They are called the "Parks of Colorado." Not many people have their homes on them now, but we may live to see them covered with cities and towns and cultivated fields.

In the northwest corner of Wyoming still more wonderful scenery is found. So many mountains, lakes, forests, water-falls, geysers, rockforms, and cañons—all grand or beautiful—are mingled together here, that the nation-

al government has set apart a large tract to be forever kept as a great public pleasureground, under the name of the "National Park."

Productions.—This group of states has not a great amount of agricultural products; but its mines of gold and silver are among the richest in the world.

Rivers.—The principal rivers are the Missouri and the Yellowstone, in Montana; the



VIEW IN THE NATIONAL PARK.

Platte, in Wyoming; and the Rio Grande [Ree'-o Grahn'-day], in New Mexico.

History.—New Mexico was settled by the Spaniards, at Santa Fé [San'-ta Fay], several years before the English had begun to occupy the Atlantic coast. The rest of this region has been settled only a short time. Therefore there are few settlements and only a small number of people in them.

[To be Recited.]

Name the divisions of the Western or Highland States. Rocky Mountain Division, Basin Division, and Pacific division.

Name the state and territories in the Rocky Mountain Division.

The State of Colorado, and the Territories of Montana, Wyoming, and New Mexico.

What is the surface of this division?

Most of the surface is occupied by the Rocky Mountains.

What is said of the mountains in Colorado?

From the lofty summit of Mount Lincoln hundreds of peaks can be seen, some of which are more than fourteen thousand feet high.

What is said of the scenery in Wyoming?

A portion of it contains so many wonders and beauties of nature that the national government has set it apart as a public pleasureground, under the name of the National Park.

What are the Parks of Colorado?

They are four plains high among the mountains, some of them as large as the State of New Jersey. They have a delightful climate, and a fertile soil.

What are the chief productions of this division?

The chief productions are gold and silver.

Which are the most important rivers?

The Missouri and Yellowstone, flowing through Montana; the Platte, in Wyoming; and the Rio Grande, in New Mexico.

LESSON XLI.

WESTERN OR HIGHLAND STATES: THE BASIN DIVISION.—CLIMATE, PRODUCTIONS, ETC.

[To be Read.]

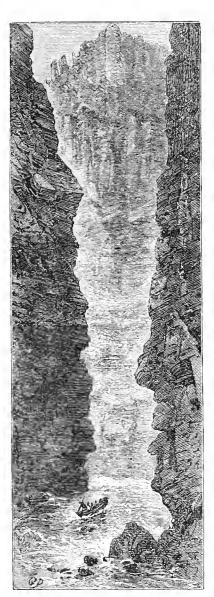
Now we descend the Rocky Mountains on the western side, and pass out of the Rocky Mountain Division into a strange and dreary region. It is a *plateau*, or plain, that is really very high; but because the mountains rise higher than the plain on every side, it seems like a basin in the midst of them. Therefore we call the state and territories that occupy this plateau the "Basin Division."

They are the State of Nevada and the Territories of Idaho, Utah, and Arizona. They have the Rocky Mountains on the east, and the Sierra Nevada and Cascade Mountains on the west.

Climate.—In the greater part of this region rain seldom falls. This is especially true of Arizona and Utah, where from day to day during the long summer the hot and dazzling sunshine pours down from a cloudless sky. Few plants can live in the dry, hard soil. Almost the only ones are the cactus in the south, and the sage-bush in the north.

Would you like to know the reason that there is so little rain? It is because the winds from the east and south, before they cross the Rocky Mountains, gradually part with the water that they bring from the Atlantic Ocean and the Gulf of Mexico. In like manner the winds from the Pacific Ocean become dry before they cross the lofty Sierra Nevada. So this poor region has few clouds and little rain.

The Colorado River, which is formed from the melting of the snow among the mountains, flows through the southern part of this region into the Gulf of California. We have already learned what cañons are, and the cañons of the Colorado are even more awful than those of other streams. Their perpen-



CAÑON OF THE COLORADO.

dicular rock walls, from half a mile to more than a mile in height, and the river dashing along in the gloomy depths, make the scenery grand beyond description.

Productions.—But this wonderful region is by no means useless, for it is rich in mines of silver and lead. The State of Nevada has silver-mines that yield more silver than any others in the world.

The Territory of Utah also carries on an excellent system of agriculture by means of *irrigation;* that is, the water of the streams is turned from its channels by means of trenches, and made to flow

over and moisten the land. So the people who live in Utah have charming and fruitful gardens, and the streets of their chief city, called Salt Lake City, are lined with beautiful trees.

[To be Recited.]

Name the state and territories of the Basin Division.

The State of Nevada and the Territories of Idaho, Utah, and Arizona.

What is peculiar to this region?

It is so enclosed by mountains that it gets but little rain.

What are the chief productions of this group?

Silver and lead. The State of Nevada has the richest silver-mines in the world.

How do the people in Utah make their land productive?

By means of irrigation; that is, by causing the water of the streams to flow over and moisten the land.

LESSON XLII.

WESTERN OR HIGHLAND STATES: THE PACIFIC DIVISION.—HISTORY, SURFACE, ETC.

[To be Read.]

Leaving the dry and desolate plains of the Basin Division behind us, we will cross the Sierra Nevada—those lofty, snow-capped mountains—and descend into the valleys near the shores of the Pacific Ocean. The states and territories that occupy these valleys are called the "Pacific Division." They are the State of California, the State of Oregon, Washington Territory, and Alaska.

California was the first of these to be settled, and it has a very remarkable history. Until the year 1848 it belonged to Mexico, and had very few people living in it except roving tribes of savages. Then it came into the possession of the United States, and some explorers found gold among its mountains. That was the beginning of its settlement and prosperity. The story flew over the United States from one end to the other that the new territory of California was full of gold, and thousands of people hurried thither in the hope of making their fortunes in gold-mining. A great many were disappointed,

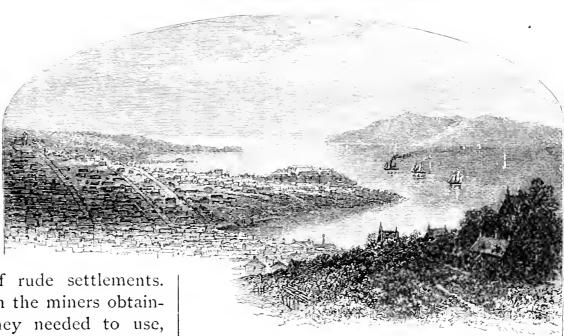
and came back poorer than they went; but many were successful, and made up their minds to live in California. Immense quantities of gold were taken out of streams and mines among the mountains. Mining soon became a regular business. Well-built towns and

cities took the place of rude settlements. San Francisco, from which the miners obtained almost everything they needed to use, grew with astonishing rapidity. Meanwhile, farmers began to cultivate the fertile lands in the valleys, and to raise great quantities of grain, fruit, and other necessaries of life; and other people started different kinds of manufactures.

The State of California now has nearly a million inhabitants, and is rapidly increasing in wealth and population. The mines still yield vast amounts of gold; and the products of the fields and the manufactories are becoming more extensive and valuable every year. San Francisco, the chief commercial city of the state, has lines of steamships and sailing-vessels to the chief ports of Europe, Asia, and the Atlantic coast of the United States. It is situated on San Francisco Bay, the entrance to which is called the "Golden Gate," and is the largest city in the United States west of the Great Central Plain. All this has taken place in less than thirty years.

The other important cities of California are Sacramento, Oakland, Stockton, and San José [San Ho-say'].

California is noted for its remarkable natural curiosities. Chief among them is a valley called the Yosemite [Yo-sem'-i-te], which is a chasm, ten miles long and three miles wide in its widest part, that has perpendic-



THE GOLDEN GATE.

ular walls of granite from three thousand to five thousand feet high, over one of which a river plunges in a wonderful water-fall.

There are also groves of enormous evergreen trees, some of which are one hundred feet around, four hundred feet high, and three thousand years old. Would you not like to see these trees, one of which, if hollowed out, would make room enough for a whole family to live in?

There is not much to be told about Alaska, for it is a very cold region, and there are few inhabitants except Indians and Esquimaux. It was bought of Russia by the United States, and seems to be valuable only for its fur-seal fisheries.

Surface and Climate.—The surface of this division is much broken. There are two ranges of mountains passing through it parallel with the coast—the Sierra Nevada and Cascade Mountains in the centre, and the Coast Ranges in the western part; so that a great deal of the land can never be cultivated. But in the valleys of the streams, especially those of the Willamette [Wil-lam'-et], in Oregon, and the Sacramento and San Joaquin [Ho-a-keen'], in California, the soil is fertile,

and immense crops of grain, fruit, and vegetables are raised.

Washington Territory has vast forests of valuable timber, and Oregon raises much wool and live-stock. Salmon-fishing is an important occupation in Oregon. Large quantities of canned salmon are shipped to eastern markets.



SALMON-FISHING

Except in Alaska, the climate is mild, and there are only two seasons—the wet and the dry. From December to April it rains almost every day, while during the rest of the year it is warm and dry.

Rivers.—The chief rivers are the Columbia, between Washington Territory and Oregon; the Willamette, in Oregon; the Sacramento, San Joaquin, and Colorado, in California; and the Yukon, in Alaska.

[To be Recited.]

Name the states and territories of the Pacific Division.

The States of California and Oregon, and Washington Territory and Alaska.

What is said of San Francisco?

It is the chief commercial city of California, and is the largest city in the United States west of the Great Central Plain. It

has a magnificent harbor, and lines of steamships and sailing-vessels to the principal ports of Europe, Asia, and the Atlantic coast of the United States.

Name other important cities in California.

Sacramento, Oakland, Stockton, and San José.

Name two wonderful natural curiosities of California.

The Yosemite Valley, a chasm ten miles long and three miles wide, between perpendicular walls that are from three thousand to five thousand feet high; and enormous evergreen trees that are one hundred feet around, four hundred feet high, and three thousand years old.

What is the condition of Alaska?

It is a very cold region, and seems to be valuable only for its fur-seal fisheries.

What is said of the surface of the country?

The surface is much broken by the two ranges of mountains that pass through it from north to south—the Sierra Nevada and Cascade Mountains in the centre, and the Coast Ranges near the coast.

Where is the fertile land?

In the valleys of the streams, especially in those of the Willamette, the San Joaquin, and the Sacramento.

What are the chief agricultural products?

Grain, fruits, and vegetables.

What other important products has this group of states? Gold, in California; lumber, in Washington Territory; and wool and live-stock, in Oregon.

What is said of the climate?

Except in Alaska, the climate is mild; and there are only two seasons, the wet and the dry.

Which are the chief rivers of this division?

The Columbia, between Washington Territory and Oregon; the Willamette, in Oregon: the San Joaquin and the Sacramento, in California; the Colorado, between California and Arizona; and the Yukon, in Alaska.

LESSON XLIII.

BRITISH AMERICA, MEXICO, AND CENTRAL AMERICA.

QUESTIONS ON THE MAP.

(See Map of North America.)

[To be Recited.]

What country is north of the United States? What are the principal divisions of British America? (The Dominion of Canada and the colony of Newfoundland [Néw-fond-land].) What is the capital of the Dominion of Canada? (Ottawa.) Of what does the Dominion of Canada consist? (It consists of the provinces of Nova Scotia, Prince Edward Island, New Brunswick, Quebec, Ontario, Manitoba [Man-i-to-báh], and

British Columbia, Northwest Territory, the District of Keway-din, and Northeast Territory.) What river is in the eastern part of the Dominion of Canada? Into what gulf does it flow? What two cities are on St. Lawrence River? Of what province is Quebec the capital? What city is on Lake Ontario? What large island is east of the Gulf of St. Lawrence? What is its capital? What peninsula is in the eastern part of British America? To what colony does it belong? (Newfoundland.)

What peninsula is in the southeastern part of the Dominion of Canada? What is its capital? Which province borders on the Pacific Ocean? What is its capital?

What country is south of the United States? What peninsula is in the western part of Mexico? What peninsula is in the eastern part? What gulf is between the peninsula of California and the main-land? What gulf is east of Mexico? What is the capital of Mexico? What is the chief seaport? On what gulf is it? What country is southeast of Mexico? What sea is east of Central America? What ocean is west? What isthmus connects Central America with South America?

LESSON XLIV.

BRITISH AMERICA.—CLIMATE, PRODUCTIONS, ETC.

[To be Read.]

We have finished the study of our own country, and now we will learn something about our neighbors. We will begin with those who live to the north of us in British America; for all the northern part of North America, except Greenland, Iceland, and Alaska, belongs to Great Britain, and is called British America. It is divided into the Dominion of Canada and the colony of Newfoundland.

Most of this vast region is so very cold that few people live there. It is only near the borders of the United States that we find roads and fields, and the settled homes of white men.

If we look on the map, we shall see a peninsula lying between Lake Huron, Lake Erie, and Lake Ontario. On that peninsula, and in the valley of the river St. Lawrence, most of the people of British America live.

The climate of this populous region is like that of the portion of the United States which is near by; and every boy and girl in the northern part of New York or of New England knows very well what that means. It means short, but warm, delightful summers, when the leaves are green and the flowers are beautiful. It means also long winters, when the snow lies two or three feet deep on the ground, and the air is so frosty that the moisture of men's breaths freezes on their beards when they go out-of-doors; when the jingle of sleigh-bells takes the place of the rumbling of wheels, and the boys and girls have good sport coasting and skating; and when, in the long evenings, there is many a merry-making in the comfortable homes around the crackling fires.

It is not the milder climate alone that has led most of the people of British America to live where they do, but also the good chance they have for fishing and for commerce. They have many vessels that do business on the Great Lakes, and steamboats and other vessels are constantly passing up and down the noble river St. Lawrence, except when it is frozen over. Huge rafts of lumber also go floating down. The large cities of Quebec and Montreal are on this river, and they have many ships that trade with the countries of Europe and other parts of the world.

The people who live near the shores of the Atlantic and on the islands near by make use of the ocean for something more important to

FALLS OF MONTMORENCY, NEAR QUEBEC.

them than commerce. Not far from the island of Newfoundland, and over a large tract of the ocean, the water is quite shallow. This tract is called the "Banks of Newfoundland," and abounds in cod and other excellent fish. There is fine fishing also in the gulfs and bays on the coast and among the islands. So this is a region of bold and hardy fishermen. The cod, herring, and seal fisheries give support to a large number of people.

Productions.— Fish, oil, furs, lumber, grain, and coal are the chief productions of this northern region. The coal-mines are in the

province of Nova Scotia.

Important Cities.—The most important cities of British America are Montreal and Quebec, in the province of Quebec; Toronto and Ottawa, in Ontario; St. John, in New Brunswick; Halifax, in Nova Scotia; and St. Johns, in Newfoundland. Halifax, the capital of Nova Scotia, is noted as a stopping-place for steamships on their voyages to and from Europe. It has one of the finest harbors in the world.

Government.—The chief ruler of the Dominion of Canada is called the Governor-general, and is appointed by the Queen of Great Britain. Of the other rulers and law-makers, some are appointed by the Governor-general, others are chosen by the people.

History.—The valley of the St. Lawrence was first settled by the French, who built the cities of Quebec and Montreal, and had homes and farms in all the neighboring region. At length there was war between France and England, and the English gained possession of the country. But the French people remained, and their descendants now dress much as their forefathers did, and speak the same language, and preserve most of their habits and customs.

[To be Recited.]

What is the northern part of North America called? It is called British America.

Why is it called British America?

It is so called because it belongs to Great Britain.

Into what is it divided?

It is divided into the Dominion of Canada and the colony of Newfoundland.

In what part of British America do most of the people live?

On the peninsula between Lake Huron, Lake Erie, and Lake Ontario, and in the valley of the river St. Lawrence.

What is the climate of this part of the country?

It is like that of the portion of the United States near by—the summers are short and warm, the winters long and cold.

What is said of the fisheries of British America?

On the Banks of Newfoundland, and in the gulfs and bays along the coast, there is an abundance of excellent fish, and the cod, herring, and seal fisheries are extensive.

What are the chief productions?

Fish, oil, furs, lumber, grain, and coal are the chief productions.

Name the most important cities of British America.

Montreal and Quebec, in the province of Quebec; Toronto and Ottawa, in Ontario; St. John, in New Brunswick; Halifax, in Nova Scotia; and St. Johns, in Newfoundland.

What is the chief ruler of the Dominion of Canada called? The chief ruler is called the Governor-general.

By whom is he appointed?

By the Queen of Great Britain.

How are the other rulers and law-makers appointed?

Some are appointed by the Governor-general, others are chosen by the people.

LESSON XLV.

MEXICO AND CENTRAL AMERICA.— SURFACE, CLIMATE, ETC.

[To be Read.]

Now we will make a visit to our neighbors on the south, who live in Mexico. The Mexicans are divided into three classes: the creoles, the mestizos, and the native Indians. The mestizos are the most active of all. The mechanics, merchants, and soldiers come chiefly from that class. But they are very ignorant, and, although active, are more fond of amusement than of work. They are wild and quarrelsome too, and keep their government in trouble almost all the time by their lawless conduct.

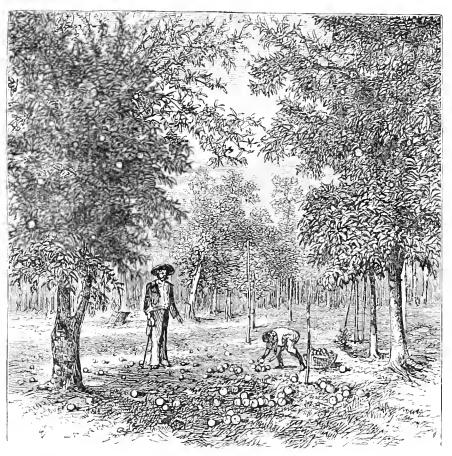
Mexico has every possible kind of climate. Let us take a journey through a part of this country, and we shall find out the cause of this variety of climate.

We will start from the seaport of Vera Cruz [Vay'-ra Kroos], on the Gulf of Mexico. We first cross a level tract that extends all along the coast, and is from five miles to a hundred miles wide. The climate is here very hot, as we might expect it to be, for it is in the Torrid Zone; and as we look over the fields, we see growing there the products of the Torrid Zone, such as cotton, sugarcane, coffee, indigo, bananas, oranges, and pineapples. We also pass through forests containing huge mahogany-trees, and under palm-trees with their great fan-like leaves.

After crossing this level tract, we come to a steep ascent, like the side of a mountain, and we go climbing up along the mule-paths—for there are few roads—until we have ascended fully a mile and a half above the sea. Then there opens out before us a vast plateau, or table-land, that stretches away over all the central part of the country.

On this plateau most of the Mexicans live; and instead of the hot climate of the low-lands by the coast, they have the delightful climate of the middle portion of the Temperate Zone. It is like that of North Carolina and Tennessee, except that Mexico has only two seasons—the wet and the dry.

What causes this temperate climate in a part of the Torrid Zone? We have already learned that the higher one goes above the



ORANGE-GROVE.

level of the ocean, the colder it becomes. So the height of the great Mexican plateau above the ocean is sufficient to change the climate from torrid to temperate.

Productions.—The productions, as well as the climate, are changed. The staple crops of the hot belt will not grow on the plateau; and on the plateau the inhabitants raise grain, vegetables, and fruits, that will not grow on the coast. So it happens that one can breakfast in the climate and on the productions

of the Torrid Zone, and, by climbing to the plateau, can dine in the climate and on the productions of the Temperate Zone.

An important product of the plateau is cochineal, which is made from a little bug. This bug feeds on a variety of the *cactus*—a plant common in that region—and the Mexicans cultivate that variety in great quantities. The little bugs increase on the plants until the leaves are covered with them. Then they

are brushed off into bags, killed in hot water, and dried. Afterwards they are ground into powder, and make the beautiful cochineal dye.

When the Spaniards conquered Mexico, they found that the precious metals were very abundant. In the temples and palaces, and even in private dwellings, were vessels and ornaments of gold and silver. The Spaniards were not long in discovering the mines from which these treasures had been taken. They are chiefly on the west side of the Sierra Madre Mountains, and are among the richest in the world. There are also rich mines of quicksilver and other metals. Of late years, few of the mines have been worked, and but little is now obtained from them.

City of Mexico. — There are several cities on the plateau, and in the southern part is the city of Mexico, the capital of the country. This is one of the

most beautiful cities in the world. It is in a valley in the midst of gardens and orange-groves, that make a lovely fringe of green all around it. Farther off are lakes, whose waters sparkle in the sunlight; while still farther beyond is a circle of very lofty mountains whose tops are always covered with snow.

Central America. — Between Mexico and South America is a country called Central America. It consists of small states, which are very often at war with one another.



BRINGING ORES FROM THE MINES.

[To be Recited.]

What is said of the climate of Mexico?

Mexico has every possible variety of climate.

What is the chief seaport of Mexico?

Vera Cruz.

What is said of the land along the coast of the Gulf of Mexico?

There is a level strip from five miles to a hundred miles wide, whose climate is very hot.

Name some of the productions of this strip of land.

Cotton, sugar-cane, coffee, indigo, bananas, and pineapples.

Where do most of the Mexicans live?

On a plateau, or table-land, which has the climate of the middle part of the Temperate Zone.

Name some of the productions of the plateau.

Grain, vegetables, fruits, and cochineal.

What is said of the mines of Mexico?

Its gold and silver mines are among the richest in the world, although few of them are worked at the present time. There are also valuable mines of quicksilver.

What is said of the city of Mexico?

It is one of the most beautiful cities in the world.

What country is between Mexico and South America? Central America.

LESSON XLVI. QUESTIONS FOR REVIEW.

[To be Recited.]

Name the West Central States. What is their extent? Describe their surface. Describe their climate. Name the chief productions. What minerals have these states? Name the chief manufacturing places. What advantages for commerce have these states? Name the chief commercial cities.

Name the States of the Plains. What is a territory? What is the extent of this belt of states? Describe the climate. Name the chief productions. Which are the largest rivers? Name the chief cities.

Name the divisions of the Western or Highland States. For what is the Rocky Mountain Division remarkable? What are the chief productions? Describe the climate of the Basin Division. Why does this division have so little rain? Name the chief productions. Name the states and territories of the Pacific Division. Describe the growth of California. What is said of San Francisco? Name other important cities in California. What natural curiosities has California? Describe the surface of this division. Name the chief products.

How is British America divided? Describe its climate. What advantages for commerce has British America? What are the chief products? Name the chief cities.

Describe the climate of Mexico. Why has the plateau a mild climate? Name the chief productions of Mexico. What is said of the mines?



SOUTH AMERICA.

LESSON XLVII. QUESTIONS ON THE MAP.

[To be Recited.]

What sea is north of South America? What ocean is east? What ocean is west? What isthmus connects South America with North America? What is the most northern cape of South America? What is the most eastern cape? What is the most southern cape? What is the most western cape? What mountains extend the entire length of the western part of the continent?

What countries of South America border on the Caribbean Sea? What countries border on the Atlantic Ocean? What countries border on the Pacific Ocean? What one has no sea-coast? What countries are crossed by the equator? What countries border on Brazil? What countries are crossed by the Andes Mountains?

What river is in the northern part of Colombia? In what direction and into what body of water does it flow? What is the capital of Colombia? What two seaports are on the Isthmus of Panama? What is the capital of Ecuador? What two volcanoes are in Ecuador? What is the capital of Peru? What is the capital of Bolivia? What lake is between Peru and Bolivia? What city is southeast of La Paz? What is the capital of Chili? What city is northwest of Santiago? What strait and what group of islands are south of Patagonia?

What is the chief river of the Argentine Confederation? What is the capital? What is the capital of Uruguay? What is the capital of Brazil? Name two other cities on the eastern coast of Brazil. What large river is in the northern part of Brazil? Name one of its northern branches. Name one of its southern branches. What river is east of the Amazon? What island is between them? What are the divisions of Guiana? What is the capital of each? What is the capital of Venezuela? What large river crosses Venezuela? What island is northeast? What gulf is north?

LESSON XLVIII. SURFACE, CLIMATE, ETC.

[To be Read.]

Surface. — The continent of North America has three systems of mountains extending entirely across it, from north to south: one near the middle, and one a little way from the coast on each side. The continent of South America is quite different. It has only one great mountain system, which extends along the entire western coast; and one of its ranges is so near the ocean that, in many places, its steep sides rise directly out of it. This mountain system is called the Andes. All the rest of the surface, except a few short, low ranges of mountains in the northern and eastern portions, is one vast plain.

The Andes are wonderful mountains. Some of their summits are nearly twice as high as the Rocky Mountains, and are among the loftiest in the world. Many of them are volcanoes. There are more than fifty of these fire-mountains, some of which are always pouring out smoke and flame.

Plateaus of the Andes.—The space between the ranges of the Andes is a belt of high plateaus, in some places two miles above the level of the sea; and, as in Mexico, while the plains at the foot of the mountains have the hot, moist, and unhealthy climate of the Torrid Zone, on the table-lands the climate is temperate, healthful, and delightful.

On these table-lands a large part of the civilized people of South America live. Here are many great cities, the capitals of the different countries; and yet in this whole region violent earthquakes sometimes occur that do

terrible damage, shaking down houses and destroying many lives.

The sides of the Andes are very steep everywhere, and are broken by sharp ridges, lofty peaks, and chasms of frightful depth.



ASCENDING THE ANDES.

The only roads are narrow paths that cross the chasms on rope bridges, and are sometimes made by cutting into the face of the solid rock. As the traveller goes along in one of these dangerous paths, a misstep would send him down the precipice. The only beasts of burden are mules and llamas. There are many roads where no beast can go, and travellers are carried in chairs which are fastened to the backs of the native Indians.

South America, unlike North America, has only a few rivers. Nearly all of its territory is drained by three great rivers—the Orinoco, the Amazon, and the La Plata [Lah Pláh-ta] —which flow into the Atlantic Ocean.

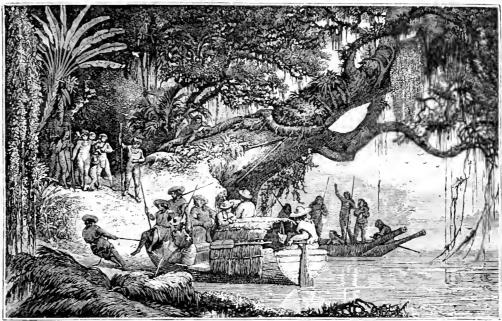
On the borders of each of these rivers are vast level tracts of land. The tracts near the Orinoco have no trees, and are called *llanos*, a Spanish word that means level fields. After the rainy season they are covered with excellent grass, that feeds immense herds of cattle and horses, which are the chief sources of wealth in that region. By and by they become dry and parched; the grass withers, and is blown away; and the cattle are driven to moister places near the mountains. the wet season comes again; torrents of rain fall on the plains and slopes of the Andes, and run down and flood the streams; and the grass springs up, and the cattle come back to their plentiful food.

The plains of the Amazon are called *sclvas*, a Spanish word that means *woods*, because they are covered with thick forests. The Amazon is the largest river on the globe. It is 150 miles wide at its mouth, and vessels can sail on it nearly to the Andes, a distance of 3000 miles.

The selvas extend over immense tracts of land, and, as the air is always hot and moist. and the soil very fertile, all kinds of plants that like heat and moisture grow more plentifully and richly here than anywhere else in the world. The trees stand thickly together, and are of enormous size and height; flowering vines climb among their branches, and hang in festoons between them; and underneath is a thick and tangled growth of canes, ferns, and vines.

In the rainy season, and when the floods come from the slopes of the Andes, the selvas are changed into a vast swamp. On this account these plains have but few inhabitants. Miserable Indian villages, here and there on the higher spots, are the chief abodes of men.

The plains of the La Plata are called *pampas*—a word that means *plains*. They are treeless, but grassy, and feed countless herds of cattle and millions of sheep and horses.



SCENE ON THE AMAZON

[To be Recited.]

How many mountain systems has South America?

It has only one great mountain system, which extends along the entire western coast, and is called the Andes.

What is the surface of the rest of the continent?

The surface of the rest of the continent, except a few short, low ranges of mountains in the northern and eastern portions, is one vast plain.

What is said of the Andes Mountains?

Some of their summits are among the highest in the world, and many of them are volcanoes.

What are the plateaus of the Andes?

They are the high tracts between the mountain ranges.

What is the climate of the plateaus?

The climate of the plateaus is temperate and healthful.

What is the climate at the foot of the mountains?

It is hot, moist, and unhealthy.

How do the people travel over the Andes?

The only beasts used in travelling are mules and llamas. In some places travellers are carried on the backs of Indians. Name the three great rivers of South America.

The Orinoco, the Amazon, and the La Plata.

What are the plains that border these rivers called?

The plains of the Orinoco are called *llanos*, those of the Amazon *sclvas*, and those of the La Plata *pampas*.

What use do the people make of them?

The llanos and pampas feed immense herds of cattle and horses. The selvas are so wet that they are of little use.

LESSON XLIX.

SOUTH AMERICA. — COUNTRIES, PRO-DUCTIONS, AND ANIMALS.

[To be Read.]

Andes Countries.—In the region of the Andes are six countries, Colombia, Ecuador [Ecwa-dóre], Peru, Bolivia, Chili, and Patagonia. Most of their inhabitants live on the tablelands. They raise the grains, vegetables, and other products of the Temperate Zone.

Besides these products, which are common to all the Andes countries, except Patagonia,

Colombia exports coffee and cotton from its lowlands; Peru exports guano from its islands; Chili, wheat and copper-ore; and Bolivia and Peru, silver-ore and saltpetre.

Patagonia is a poor, cold, rocky country, whose uncivilized, half-starved people lead most wretched lives.

The capitals of these countries are on the high table-lands. They have ports down on the coasts. The most important are Guayaquil [Gwi-a-keel'], in Ecuador; Callao [Callah'-o], in Peru; and Valparaiso [Val-pa-ri'-zo], in Chili. Cuzco [Cooz'-co] and Arequipa [Ah-ray-kee'-pa], in Peru, and Sucre [Soo'-cray] and Cochabamba [Coch-a-bam'-ba], in Bolivia, are also important cities. Cuzco is the oldest city in Peru. It was founded by civilized Indians nearly five hundred years before the discovery of America by Columbus.

Countries of the Plains.— There are six countries on the plains of South America, named Venezuela [Ven-e-zwee'-la], Guiana [Ghe-ah'-na], Brazil [Bra-zeel'], Paraguay [Par'-a-gway], Uruguay [U'-ru-gway], and the Argentine Confederation.

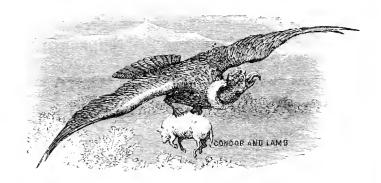
The first three of these countries - Venezuela, Guiana, and Brazil - which are in the Torrid Zone, are among the most fertile and productive in the world. They raise the wellknown products of that zone—coffee, cotton, sugar, and the like; and in their magnificent forests are the cocoa-nut and other palm trees, the caoutchouc or india-rubber tree, dyewoods, and a great variety of beautiful kinds of wood, such as rosewood and mahogany. In addition, Venezuela exports hides from the herds on its llanos; Guiana exports sugar and spices; and Brazil, hides and diamonds. More than half of all the coffee used in the world comes from the rich plantations of Brazil, which is a very large and growing empire.

Paraguay and Uruguay are small and unimportant countries south of Brazil. The Argentine Confederation, still farther south, is a prosperous country. The chief exports of these countries are hides and wool from the herds and flocks on the pampas.

Rio Janeiro [Ree'-o Ja-nay'-ro], the capital and chief seaport of Brazil; Buenos Ayres [Bo'-nos Air'-iz], the chief seaport of the Argentine Confederation; and Montevideo, the capital of Uruguay, are large and important cities. Bahia [Bah-ee'-a], Pernambuco [Pernam-boo'-co], and Maranham [Mar-an-ham'] are also important commercial ports on the eastern coast of Brazil.

All the countries of South America, except Brazil, Guiana, and Patagonia, were conquered and settled by Spaniards. Brazil was settled by Portuguese.

Animals.—High up among the peaks of the Andes is the condor, a huge bird which builds its nest on some cliff that can not be reached by man, and is strong enough to carry away a lamb in its talons. Farther down the moun-



tains are the little chinchilla, from which the costly fur of that name is obtained, and the alpaca, from which comes the wool of alpaca cloth. On the plateaus of the Andes is the llama, an animal not much larger than a goat, and very useful in carrying burdens over the mountains. The llamas are worked in droves, hundreds together, and are so obedient that they will travel steadily and quietly up and down the dangerous pathways, one after the other, like a file of soldiers.

In the forests of the Orinoco and the Amazon the number and variety of creatures are truly wonderful. Overhead, thou-

sands of monkeys chatter and play among the trees, while gay-colored parrots fly about and fill the air with their harsh cries. Perhaps that huge snake, the boa-constrictor, may be seen twined around a branch, wait-

ing to strike its prey, and crush it in its coils. Below, the smaller serpents glide through the leaves, and the alligator basks on the riverbank, while beautiful hummingbirds flit from flower to flower. At night, the jaguar, a kind of tiger, prowls around for prey, and the hog-like tapir runs about in search of the fruit and grass that are its food.

Swarms of flies and mosquitoes hover over the damp places; gaudy butterflies



flutter in and out among the flowers; and beetles, large and small, fly about, and their brilliant, horny wings and bodies glisten and flash in the light.

[To be Recited.]

Name the Andes countries.

They are Colombia, Ecuador, Peru, Bolivia, Chili and Patagonia.

What special articles do these countries export?

Colombia exports coffee, cocoa, and cot-

ton; Peru, guano; Chili, wheat and copperore; and Peru and Bolivia, saltpetre and silver-ore.

Name the chief commercial cities of the Andes countries. Valparaiso, Callao, and Guayaquil.

Name the countries of the plains.

Venezuela, Guiana, Brazil, Uruguay, Paraguay, and the Argentine Confederation.

What are the exports of Venezuela, Guiana, and Brazil? The exports are coffee, cotton, sugar, spices, caoutchouc, dye-woods, and hides.

What are the exports of the Argentine Confederation? Hides and wool.

Name the chief commercial cities of the countries of the plains.

Rio Janeiro and Bahia, in Brazil; Buenos Ayres, in the Argentine Confederation; and Montevideo, in Uruguay.

Name some of the animals of the Andes countries.

The condor, the alpaca, the chinchilla, and the llama.

Name some of the animals of the plains.

The jaguar, the tapir, the boa-constrictor, the alligator, and many kinds of birds, monkeys, reptiles, and insects.

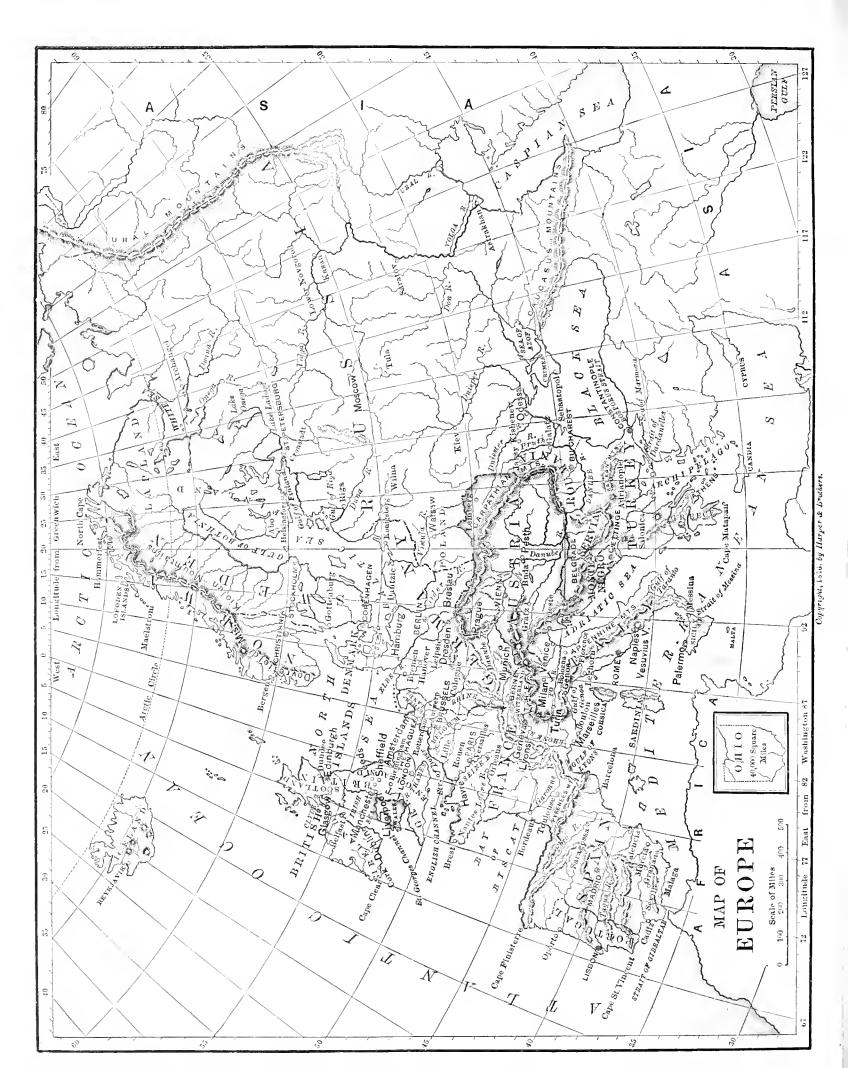
LESSON L. QUESTIONS FOR REVIEW.

[To be Recited.]

What can you say of the surface of South America? How does the surface of South America differ from that of North America? Describe the plateaus of the Andes. What is said of the difficulty of travelling among the Andes? Name the chief rivers of South America. Which of them is the largest river in the world? Describe the llanos. The selvas. The pampas. Which of these plains are least useful?

Name the Andes countries. What are their chief productions? Name the capital of each. Name their chief commercial cities.

Name the countries of the plains. What is said of Venezuela, Guiana, and Brazil? Name the chief exports of Paraguay, Uruguay, and the Argentine Confederation. Name the chief cities of the countries of the plains. Name some of the animals of South America.



EUROPE

LESSON LI.

QUESTIONS ON THE MAP.

[To be Recited.]

What ocean is north of Europe? What continent is east? What continent is south? What ocean is west? What mountains and river form part of the eastern boundary? What sea forms part of the eastern boundary? What mountains and what sea separate Europe from Asia on the south? What sea separates Europe from Africa?

Name the countries of Europe. (Great Britain and Ireland, Norway, Sweden, Denmark, Russia, Germany, Austria, Roumania [Roo-mah'-ne-aj, Servia, Montenegro [Mon-te-nay'-gro], Turkey, Greece, Italy, Switzerland, Netherlands, Belgium, France, Spain, and Portugal.)

What islands are in the western part of Europe? (The British Islands.)
Which is the larger of these islands? (Great Britain.) What three countries are included in the island of Great Britain? What is the capital of the Kingdom of Great Britain and Ireland? (London.) On what river is it? Name two large cities in the western part of England. Which are the two chief cities of Scotland? What is the chief city of Ireland?

What country is south of England? What channel is between England and France? What mountains are in the southern part of France? What river in France flows into the Gulf of Lyons? What river is in the northern part of France? What river is it? What city is in the southern part of France? On what gulf is it? What city is north of Marseilles?

What two large countries are near the central part of Europe? Which of these borders on the Baltic and North Seas? What river is in the western part of Germany? What other country does it cross? Into what does

it flow? What is the capital of Germany? What city is northwest of Berlin? What one is south? What one is east of Dresden?

What mountains are in the northeastern part of Austria? What mountains are in the western part? What is the chief river of Austria? What is the capital of Austria? On what river is it? What other city is on the Danube? What city is northwest of Vienna?

What large country occupies the eastern part of Europe? What sea and what gulf are west of Russia? What river in Russia flows into the Caspian Sea? What is the capital of Russia? What city is southeast of St. Petersburg? What city is southwest? What city is on the Black Sea?

What large island is northwest of Europe? To what country does it belong? (Denmark.) What is the capital of Norway? What is the capital of Sweden? What country is south of Norway? What is the capital of Denmark? What two countries are northwest of Germany? What is the capital of Belgium? What is the capital of the Hague?

What two countries are in the southwestern part of Europe? What is the capital of Spain? What strait separates Spain from Africa? What is the capital of Portugal?

What peninsula is southeast of France? What sea is east of Italy? What large island is near the southern coast of Italy? What two large islands are west of Italy? To what country does Sardinia belong? (Italy.) To what country does Corsica belong? (Irance.) What is the capital of Italy? What city is southeast of Rome? What is the chief river of Italy? What mountains extend nearly the entire length of Italy?

What small and mountainous country is north of Italy? What is the capital of Switzerland? What city is in the western part? What three countries are southeast of Austria? Name the capital of each. What country is southwest of the Black Sea? What is the capital of Turkey? On what strait is it? What river is between Roumania and Turkey? Into what does it flow? What peninsula is south of Turkey? What is the capital of Greece?

er are there so many large and powerful nations, and so many civilized and educated people.

One of the first things we shall notice in our study of Europe is its very irregular shape. It has five great peninsulas, which are formed by means of two vast inland seas—the Baltic Sea, in the northern part of the continent, and the Mediterranean Sea, on its southern border.

LESSON LII. SURFACE, RIVERS, ETC.

To be Read.]

Let us now cross the Atlantic Ocean to the continent of Europe. It is one of the smallest of the continents, but it is the greatest of all in importance; for in no oth-

Mountains.—Another important fact to be noticed is the position of the mountains, which is very different, as you may see, from that of the mountains of North America and South America. The latter extend in unbroken ranges nearly the entire length of the continent from north to south; while the chief mountains of Europe extend in a broken chain from east to west.

The different parts of this broken chain have different names. Between France and Spain, the mountains are called the Pyrenees; in Switzerland, the Alps; in Austria, the Carpathian Mountains; and between Russia and Asia, the Caucasus Mountains.

The Dovrefield [Dov-re-fe-eld'] Mountains, in Norway; the Ural Mountains, in Russia, between Europe and Asia; and the Apennines, in Italy, are the only other mountains of much importance.

The Alps, in Switzerland, are very celebrated. Their scenery is thought to be finer than any other in the world: for their lofty peaks are always covered with snow; while the valleys between them are green and lovely, with pretty villages in them here and there; and there are beautiful lakes that reflect in their clear water the tall, white summits around them.

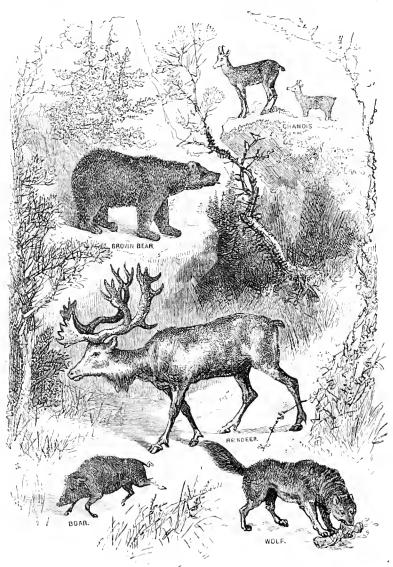
Rivers.—There are no great river systems in Europe. The Volga, in Russia, is the longest river. It is two thousand miles long, but has few great branches. The Danube, which flows through Austria and Roumania into the Black Sea, is next in size; and a great deal of commerce is carried on by its means. The Po, in Italy; the Rhine, in Germany and the Netherlands; and the Rhone, in France, are also important navigable rivers.

Climate.—One of the most remarkable things about Europe is its climate; for parts of it are a great deal warmer than we might expect them to be. Thus England and the Netherlands are as far north as icy and barren Lab-

rador on our own continent, yet they have a mild and delightful climate; while the portions that border on the Mediterranean Sea, although in the midst of the Temperate Zone, have almost the climate of the Torrid Zone. How does this happen?

We remember how the Gulf Stream comes out of the Gulf of Mexico, and, passing up the coast of the United States, sweeps across the ocean, and bathes the shores of Europe. This wonderful current, and the warm winds from the Atlantic, make the climate of Great Britain and Ireland, and of the coast of the mainland, warm and pleasant.

What gives the countries on the Mediterranean Sea such a delightful climate? In the northern part of Africa, in the Torrid Zone, is a vast sandy desert. The winds, as they



blow across this desert, are heated by the hot sands, and passing over the Mediterranean Sea, keep the countries around it warm. Then, again, the high Alps turn away the cold winds that blow from the north.

Animals.—In the cold northern part of Europe, where the Laplander lives, is the reindeer, which draws his sledge, gives him milk, and furnishes most of his clothing. In the vast forests of Russia are great numbers of wolves, which are very fierce and dangerous. In the forests of Germany and France there were once many black bears and wild boars; but they are fast disappearing. The most remarkable among the birds of this continent is the lammergeyer, or bearded vulture, a bird somewhat like the American eagle. It is found among the lofty peaks of the Alps.

To be Recited.

How does Europe compare with the other continents in size?

It is one of the smallest of the continents.

Why is it the most important of all the continents?

Because it contains more rich and powerful nations and more civilized and educated people than any other continent.

What is the shape of Europe?

Europe is very irregular in shape.

What is the position of the chief mountains of Europe?

They are in a broken chain running east and west.

Name the principal mountains of Europe.

The Pyrenees, the Alps, the Carpathian Mountains, and the Caucasus Mountains.

Which are the chief navigable rivers?

The Volga, the Danube, the Po, the Rhine, and the Rhone.

What is remarkable about the climate of Europe?

Some parts of Europe are much warmer than corresponding portions of our own continent.

What causes the mild climate of western Europe?

It is caused by the Gulf Stream, and by the warm winds from the Atlantic.

What causes the warm climate of southern Europe?

It is caused, in part, by the Desert of Sahara, which heats the winds that blow from the south; and, in part, by the Alps, which turn away the cold winds from the north.

Name some of the animals of Europe.

The reindeer, the wolf, the black bear, the wild boar, and the lammergeyer.

LESSON LIII.

THE KINGDOM OF GREAT BRITAIN AND IRELAND.

[To be Read.]

The "United Kingdom of Great Britain and Ireland" is one of the most important countries in the world. The title commonly given it is "Great Britain." It includes England, Scotland, Wales, and Ireland.

The British are a very remarkable people. Once they owned only the British Isles—Great Britain and Ireland. Now they have possessions in every part of the world, and are rulers over a great many millions of people. They own nearly one half of North America; British Guiana, in South America; British India, with its millions of inhabitants, in Asia; several colonies on the coast of Africa; and the whole of the continent of Australia. In addition, they own a large number of valuable islands in different parts of the world. Great Britain and Ireland, together with these vast possessions, form the British Empire, which is the most extensive on the globe.

The British people are crowded very closely together in their island home. Great Britain and Ireland contain thirty millions of in-

habitants, yet they are less in size than the State of California.

The people of Great Britain have not only been brave and bold in enlarging their dominions, but they have also been wonderfully ingenious in inventing machinery and in manufacturing a great variety of goods. They manufacture great quantities of *hardware* in



SCENE IN LONDON.

Birmingham; cutlery—that is, knives, forks, and sharp-edged tools—in Sheffield; woollen goods in Leeds; cotton goods in Manchester and Glasgow; and linen goods in Belfast; and wherever their manufactories are situated there, of course, are a great many people. In this way large cities and towns have grown up all over Great Britain.

The largest commercial ports are London, on the river Thames, Liverpool, and Glasgow.

London, the capital of the vast British Empire, contains between three and four millions of inhabitants, and is the largest and richest city in the world.

Great Britain has mines of coal, which supply the people with most of their fuel. It has also mines of iron, tin, copper, and other metals. Out of its iron are built many noble ships. On the banks of a single river in Scotland—the Clyde—there are no less than *forty thousand* men engaged in ship-building.

Many of the people are occupied in agriculture. The climate of England is moist as well as mild, and the country everywhere looks like a garden, it is so carefully and thoroughly cultivated. Excellent crops of grain, vegetables, and grass, and fine cattle, horses, and sheep are raised. The chief business of Ireland and of the lowlands in Scotland is farming. The fields of Ireland look so green and beautiful that that island is often called the "Emerald Isle."

The chief ruler of Great Britain is usually a king. At present Queen Victoria is its chief ruler.

[To be Recited.]

What is the United Kingdom of Great Britain and Ireland commonly called?

Great Britain.

What does it include?

England, Scotland, Wales, and Ireland.

What does the British Empire include?

It includes Great Britain and Ireland; the northern part of North America; English Guiana, in South America; British India, in Asia; several colonies in Africa; the whole of Australia; and many islands in various parts of the world.

What are some of the most noted manufacturing eities?
Birmingham, Sheffield, Leeds, Manchester,
Glasgow, and Belfast.

What are the chief commercial ports?

The chief commercial ports are London, Liverpool, and Glasgow.

What is said of London?

It is the capital of the British Empire, and the largest and richest city in the world.

What mines has Great Britain?

It has mines of coal, iron, tin, and copper.

What is said of agriculture?

England is like a garden, it is cultivated so highly. Grain, vegetables, and grass, and fine cattle, sheep, and horses are raised.

LESSON LIV.

FRANCE, GERMANY, AUSTRIA, AND RUSSIA.

[To be Read.]

France.—The principal occupations of the people of France are agriculture and manufacturing. The surface of this country is made up of hills, valleys, and plains, and most

of the soil is very fertile. Grain and root-crops are raised in the northern part, and olives, oranges, and mulberry-trees, on which silk-worms feed, in the southern part. But the most important branch of agriculture is the cultivation of the vine, which forms the chief occupation of the people of central France.

A large part of this section of the country is occupied with vineyards. The vines are not cultivated on high trellises, as

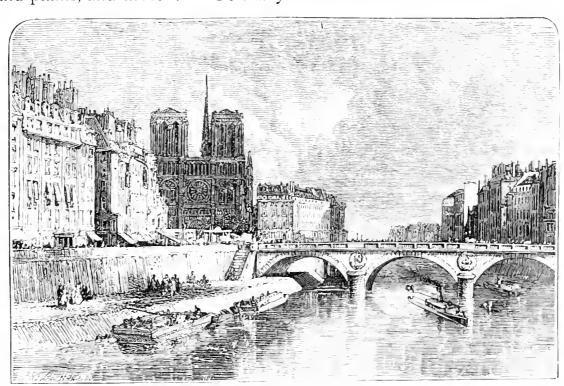
they generally are in the United States, but in rows in the open fields. They are tied to stakes, which are from six to eight feet high. The peasants have a merry time at the vintage—that is, when the ripe grapes, hanging in beautiful clusters, are gathered, and the wine is made from them.

The French manufacture gloves, jewelry, laces, silks, furniture, and many other beautiful things.

The French people are very proud of Paris, their capital. It is one of the most beautiful and charming cities in the world. Paris, Havre, Lyons, and Marseilles are the chief commercial cities of France.

Germany.—In the centre of Europe is the powerful German Empire. It is formed by the union of several different kingdoms, each of which still has its own king and separate government. The largest of these kingdoms is Prussia: the King of Prussia is the German Emperor; and Berlin, the capital of Prussia, is the capital of the German Empire. Hamburg, Breslau, Dresden, and Munich are, next to Berlin, the largest cities.

Germany is famous for its attention to ed-



SCENE ON THE SEINE, PARIS.



CASTLE IN GERMANY.

ucation. It has many excellent universities and schools. The Germans are also skilled in music.

The soil of the empire is generally fertile. The grains that belong to the Temperate Zone are raised in abundance, and also grapes, from which large quantities of wine are made. There are also mines, from which much zinc and other metals are obtained.

Its largest river, the Rhine, is very celebrated on account of the many battles that have been fought near it, and because the region through which it flows abounds in beautiful scenery. The old castles on its banks are objects of much interest to travellers.

Austria.—Southeast of Germany is another great empire, called Austria. Much of it

is mountainous; but there are many fertile plains and valleys. Its chief products are wheat, wool, wine, and salt.

Its capital, Vienna, a fine, large city, is on the river Danube, which is the chief river of Austria, and is very useful to the commerce of the empire. Prague and Pesth are its next largest cities.

Russia.—East of Germany and Austria is Russia, which is the largest country in Europe. It occupies more than half of the entire continent. Much of it is too cold for agriculture, and the greater part is covered with forests. But there are many millions of inhabitants, and much grain, wool, and hemp are exported. The forests yield vast quantities of lumber.

St. Petersburg, the capital, is a splendid city, but it is situated so far north that it has a very cold climate. Moscow and Warsaw are large cities; and Odessa is an important grain port on the Black Sea.

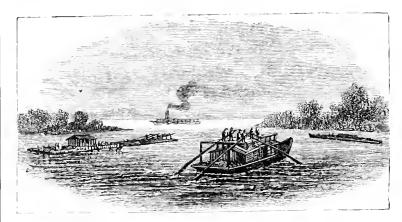
[To be Recited.]

What are the principal occupations of the people of France?

Agriculture and manufacturing.

What are some of the manufactures of France?
Silks, laces, gloves, jewelry, furniture,

Silks, laces, gloves, jewelry, furniture, and wine.



ARKS ON THE DANUBE

What is said of Paris?

It is one of the most beautiful and charming cities in the world.

What are the chief commercial cities of France?

Paris, Havre, Lyons, and Marseilles.

Of what does the German Empire consist?

It consists of several kingdoms and other states, of which Prussia is the largest.

Name the five largest cities of Germany.

Berlin, Hamburg, Breslau, Dresden, and Munich.

What are the chief products of Germany? Grain, wine, and zinc.

What are the chief products of Austria?

Its chief products are wheat, wool, wine, and salt.

Name the three largest cities of Austria.

Vienna, Prague, and Pesth.

What are the chief products of Russia?

Grain, wool, hemp, and lumber.

Name the four largest cities in Russia.

St. Petersburg, Moscow, Odessa, and Warsaw.

LESSON LV.

THE REMAINING COUNTRIES OF EUROPE.

[To be Read.]

The countries of Europe about which we have been studying—Great Britain, France, Germany, Austria, and Russia—are called the "Five Great Powers," they are so large and powerful. Now we will study about the



SCENE ON THE COAST OF NORWAY.

smaller countries of Europe, beginning with those in the northern part.

Norway and Sweden.—These two countries occupy what is called the Scandinavian Peninsula. They are separate kingdoms, but have the same king.

The climate is cold, and the surface mountainous; the inhabitants are engaged in fishing, mining, and agriculture. The iron from the mines of Sweden is the best in the world.

Denmark.—This little kingdom is situated on a peninsula that lies between Sweden and the North Sea, and on some neighboring islands. The people, who are called Danes, are chiefly occupied in agriculture and fishing.

Netherlands.—A large part of this country was once under the sea. Great banks of earth, called *dikes*, have been thrown up by the sides of the rivers and along the borders of the ocean, and thus the water is kept out. When the tides are high, the water is higher than the houses; and if a dike should break away, a whole region would be overflowed.

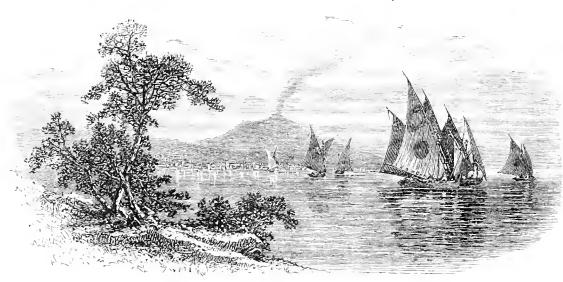
The land is very fertile, and the farm products are abundant. The Netherlands own valuable islands in the East and West Indies, and employ many ships in commerce.

Belgium.—This is another little kingdom, full of busy people. Its manufactures are varied and excellent. Here are made the delicate laces and the fine linens that are known all over the world.

Spain and Portugal.—These two kingdoms are side by side on a large peninsula south of the Pyrenees Mountains. Their principal exports are silks, wool, olive-oil, cork, wine, and fruits.

Spain was once the most powerful nation in Europe. Now it is poor and weak.

Italy.—South of the Alps is the peninsula of Italy. This is one of the most famous countries in the world; for here the ancient Romans lived. Here was ancient Rome, their magnificent capital. Modern Rome has been built on its ruins.



BAY OF NAPLES.

In Italy, too, is the remarkable city of Venice, that is built on many small islands; so that the people have canals instead of streets, and boats, called gondolas, instead of carriages and horses.

Here, near the city of Naples, is Mount Vesuvius, a volcano that often pours forth flames, melted rocks, and ashes from its summit. Nearly two thousand years ago, it buried two splendid cities — Herculaneum [Her-cu-lá-ne-um] and Pompeii [Pom-pá-yee] —deep under a storm of ashes, and destroyed their inhabitants.

Other important cities are Milan and Turin, noted for their manufacture of silk; Palermo, a great fruit-market in Sicily; Florence, celebrated for its works of art; and Genoa [Gen'-o-a], the birthplace of Columbus.

The chief products of Italy are rice, wheat, olive-oil, fruits, and silk. In the northern part are many groves of mulberry-trees.

The two large islands—Sardinia and Sicily—belong to Italy.

Switzerland.—We have already learned about the scenery of this little country which lies among the Alps. The people are temperate and industrious. On the plains and in the valleys between the mountains are fine pastures, where many cattle are raised; and butter and cheese are the chief agricultural

products. A great number of watches are made in Switzerland; and in the winter many of the peasants employ themselves in making toys for sale. Many of the toys which we see in this country are brought from Switzerland.

Turkey. — The Turks, form only a small part of the population of Turkey. They came into

Europe from Asia, several centuries ago, and conquered and took possession of the country which they now occupy. Most of the people are poor and miserable.

The chief exports of Turkey are tobacco, wine, olive-oil, fruits, silk, and carpets.

Roumania, Servia, and Montenegro.—These three countries until recently belonged to Tur-

key. They are now independent. Their chief products are similar to those of Turkey.

Greece.—The history of this country begins with the story of the famous old Greeks, who were not only very brave, but were very fond of beautiful things. In Athens, their chief city, they built temples and palaces that have been imitated by all civilized nations; and they ornamented them with pictures and statues of such beauty that the world has never elsewhere seen the like. This once famous country is now weak and unimportant.

[To be Recited.]

What is said of Norway and Sweden?

They occupy what is called the Scandinavian Peninsula.

What are the chief occupations of the people?

Mining, fishing, and agriculture.

What mines are there in Sweden?

There are iron mines, and the iron is the best in the world.

What are the chief occupations of the people of Denmark?

Agriculture and fishing.

What can you tell about the Netherlands?

Much of the land is lower than the surface of the ocean, and is protected from the water by banks of earth, called *dikes*.

For what are the Netherlands noted?

They are noted for their commerce.

For what is Belgium noted?

It is noted for its fine manufactures.

What are the chief exports of Spain and Portugal?

Wool, olive-oil, wine, and fruits.

Name five cities in Italy.

Rome, Naples, Milan, Genoa, and Venice.

What are the chief products of Italy?

The chief products are rice, wheat, oliveoil, fruits, and silk.

What are the chief products of Switzerland?

Butter, cheese, watches, and toys.

What are the chief exports of Turkey?

Tobacco, wine, fruits, silk, and carpets.

What is the condition of Greece?

This once famous country is now weak and unimportant.

LESSON LVI.

QUESTIONS FOR REVIEW.

To be Recited.

How does Europe compare with the other continents? What is said of its shape? Name its five great peninsulas. What is said of the position of the mountains of Europe? Name the principal mountains. What is said of the Alps? What is said of the rivers of Europe? What is said of the climate? Why is the climate of the British Isles warmer than that of Labrador? Why have the countries in the southern part of Europe a mild climate? Name the principal animals of Europe.

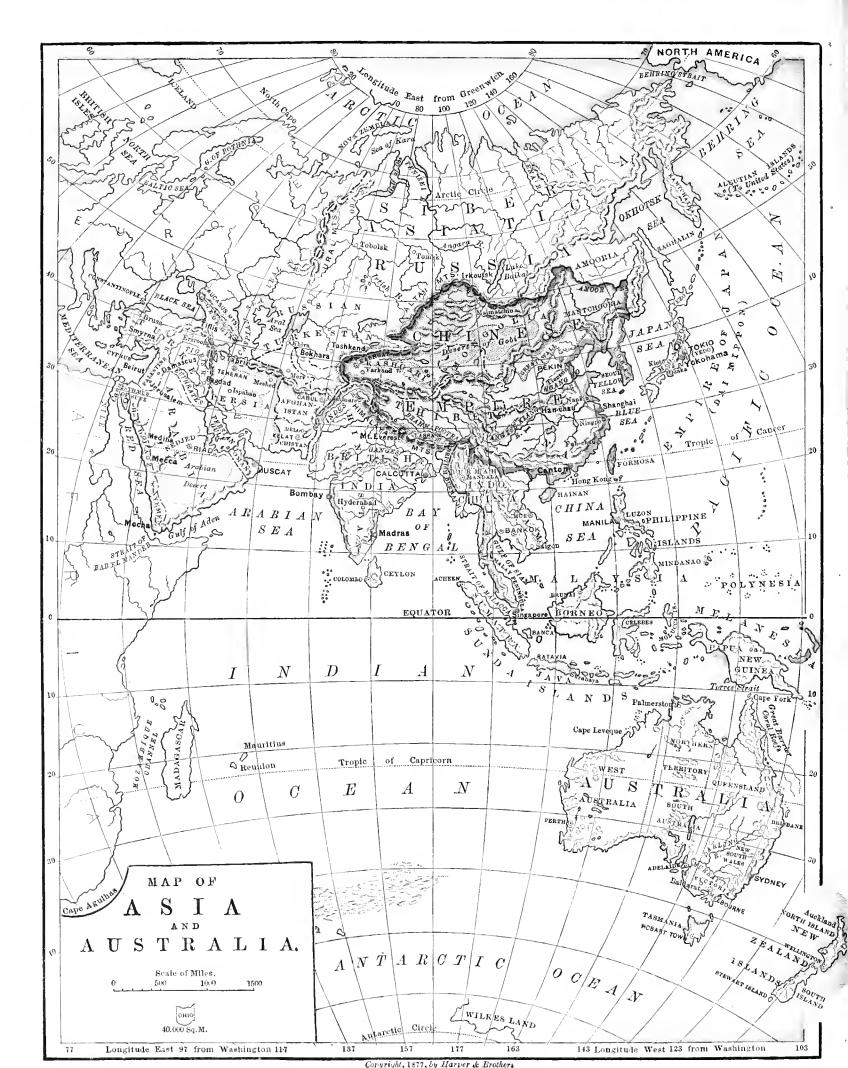
What does the Kingdom of Great Britain and Ireland include? What does the British Empire include? What are the principal manufactures? Name the chief manufacturing places. Name the chief commercial ports. What is said of London? What mines has Great Britain? What is said of ship-building on the Clyde? What is said of agriculture? What are the principal occupations of the people of Great Britain?

What are the two principal occupations of the people of France? What is said of the surface of France? Name the chief agricultural products. Name some of the manufactures. Name the most important cities. What is said of Paris?

Where is the German Empire? Of what does it consist? Which is the largest kingdom? Who is the German Emperor? What is said of Berlin? Name the five largest cities in Germany. What are the chief products of Germany? For what is Germany famous?

Describe the surface of Austria. What are the chief products? Name the three largest cities. Which is the chief river? Which is the largest country of Europe? How large is it? With what is a great part of Russia covered? What are the chief products? Name the four most important cities.

Name the "Five Great Powers" of Europe. Name the remaining countries of Europe. Which of these countries are peninsulas? What are the chief occupations of the people of Norway and Sweden? What peninsula do these two countries occupy? Where is Denmark? What are the inhabitants called? What is said of the Netherlands? What is said of Spain? What is said of Italy? Of Venice? Of Mount Vesuvius? Name the chief cities. What two large islands in the Mediterranean Sea belong to Italy? For what is Switzerland noted? What is said of the Turks? What is said of the ancient Greeks?



ASIA.

LESSON LVII. QUESTIONS ON THE MAP.

[To be Recited.]

What ocean is north of Asia? What ocean is east? What one is south? What two continents are west? What strait separates Asia from North America? What isthmus connects Asia with Africa? What two ranges of mountains form part of the boundary between Asia and Europe? What two seas and what river are between Asia and Europe? What six seas are on the eastern coast of Asia? What bay and what sea are on the southern coast? What sea is between Asia and Africa?

What large country occupies the northern part of Asia? What province is in the northern part of Asiatic Russia? Name three rivers in Siberia that flow into the Arctic Ocean. What city is in the southern part of Siberia? What province is between the Caspian Sea and the Black Sea? What city does it contain? What province is in the southwestern part of Asiatic Russia? Name two cities in Russian Turkestan. What great empire is south of Asiatic Russia? What range of mountains is between them? What is the capital of the

Chinese Empire? In what part of the Chinese Empire is China? Name two rivers in China. What city is in the southern part? What city is on the eastern coast? What city is nearly west of Shanghai?

What empire is cast of the Chinese Empire? Of what does this empire consist? (It consists of islands.) Which of them is the largest? What is the capital of Japan? What seaport is southwest of Tokio [Tó-ki-o]?

What country is south of the Chinese Empire? What city is south of Malay Peninsula? What city is on the Gulf of Siam? What country is southwest of the Chinese Empire? What mountains are between the Chinese Empire and British India? What two rivers are in the eastern part of Hindostan? What one is in the western part? What is the capital of British India? What city is on the eastern coast of Hindostan? What city is on the western coast? What large island is near the southeastern coast?

What two countries are west of British India? What is the capital of each? What country is south of the Caspian Sea? What is its capital? Name one other city of Persia. What two countries are west of Persia? What gulf is between Persia and Arabia? What seaport is in the eastern part of Arabia? What city is in the central part? What city is on the Red Sea? What two rivers are in Turkey? What two cities are on the west coast of Turkey? On what sea are they? What two cities are southeast of Beirut?

LESSON LVIII. POPULATION, SURFACE, ETC.

[To be Read.]

We are getting far away from home in our study, for we have reached the continent of Asia, which is on the side of the world opposite to that on which we live.

Asia is remarkable in many ways. In the first place, nearly all the nations of the world that have been celebrated for great deeds sprung from the people of that continent. The forefathers of the ancient Greeks and Romans, and of the English, French, Germans, and Americans of the present day, all came from Asia.

Population.—A second remarkable fact is, 26

that while most of the countries of Asia have only a thin and scattered population, nearly one half of the whole human race is crowded into the southeastern part. In British India, Indo-China, Japan, and the eastern half of the Chinese Empire, there are between seven and eight hundred millions of inhabitants; and there are not many more than that in all the world besides.

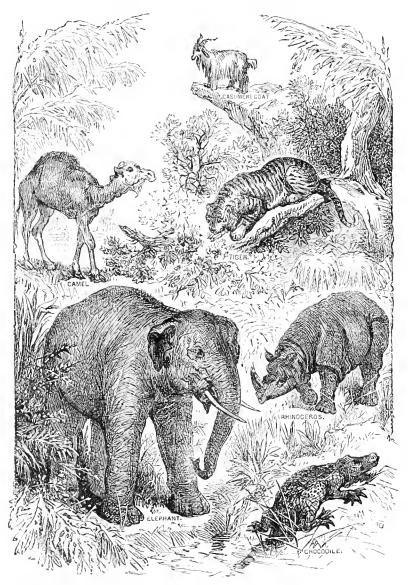
Another fact worth remembering is, that all the domestic animals—the horse, the cow, the sheep, the goat, the hog, and the "barn-yard fowls," so necessary to the comfort of people everywhere—came, at first, from Asia.

Surface.—Most of the northern part of Asia, called Asiatic Russia, is a vast level tract, whose climate is intensely cold. Through the centre of Asia, from east to west, runs a great

mountain system, and among the mountains the winters are very severe, but the summers are hot and dry. South and east of the mountains are the hot and level tracts and the peninsulas, where so many people live.

The Himalaya [Him-a-li' a] Mountains, a chain of the central mountain system, are the highest in the world. Some of their peaks are about five miles above the level of the sea.

There are vast deserts in the western and central parts of the continent.



Animals.—In the cold northern parts of Asia is the reindeer. Farther south are the sable and the ermine, little animals whose fur is very valuable. Still farther south are the camel, and the cashmere goat, of whose beautiful silky hair the fine cashmere shawls are

made. In the hot southern parts we find the camel, the elephant, and the hard-skinned rhinoceros. There are many ferocious tigers, too, which are destructive foes of the natives; deadly serpents twine among the branches of the trees, or creep among the bushes; and in the rivers are many crocodiles.

[To be Recited.]

What is said of the surface of Asia?

The northern part is very level; across the centre is a vast mountain system, and south of the mountains are peninsulas and hot, level tracts.

What is said of the Himalaya Mountains?

They are the highest mountains in the world.

What can you tell about the climate of Asia?

It is very cold in the northern part. Among the mountains, in the central part, it is cold in winter, and hot and dry in summer; in the southeastern part it is hot and moist; and in the southwestern part it is hot and dry.

Name some of the animals of Asia.

The camel, the cashmere goat, the elephant, the rhinoceros, the tiger, and the crocodile.

LESSON LIX.

ASIATIC RUSSIA, CHINA, AND JAPAN.

[To be Read.]

Asiatic Russia.—The northern part of this country has a very cold climate, and its inhabitants, who can raise little or nothing in their frozen fields, live principally on fish and the flesh of the reindeer.

In the southern part, near the great central ranges of mountains, are immense grassy plains, called *steppes*, which are inhabited by

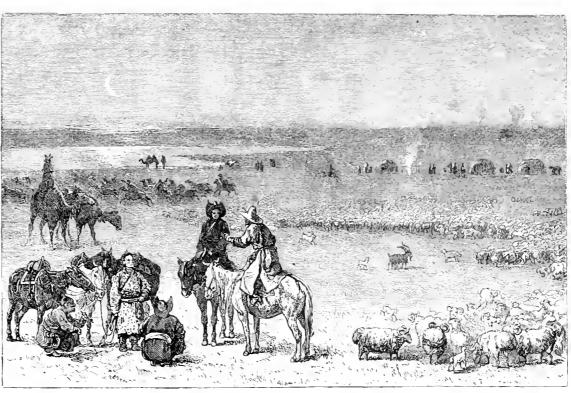
a fierce race, called Tartars. They live in tents, and go from place to place, tending their herds of camels, sheep, and horses.

China.—South of Asiatic Russia is China. The Chinese are a very strange people — different—from any other on the globe. They are very proud of their country, and call it the "Flowery Land." Though their nation is the oldest in the world, yet it has made but little progress—for many years. Thousands of

years ago the Chinese knew the arts of printing, of weaving silk, and of making gunpowder, paper, and many other ingenious and beautiful things. Yet they have invented very little machinery to help them do this work, and still make almost everything by hand.

They have some very strange customs. The infant girls of the wealthy classes have their feet tightly bandaged, to prevent them from growing; so they have only clumsy lumps for feet, making it very difficult for the poor creatures to walk. The men shave off all their hair, except around the crown of the head, and this top-lock they allow to grow very long, and braid it into a cue that hangs down their backs; and they think it a terrible disgrace to have this cue cut off. Then, again, they do not eat with knives and forks, but with little wooden or ivory rods, called chopsticks.

Many of the Chinese are engaged in making silk, paper, porcelain, lacquered ware, and other articles; but far more are occupied in agriculture. The land is carefully cultivated, besides which, some of the rivers and lakes are cov-



TARTAR LIFE ON THE STEPPES.

ered with rafts, on which are floating gardens. Indeed, there are as many as three millions of Chinese who live in boats and in houses built on rafts, because there is not room for them on the land. The chief productions of China are rice, tea, cotton, and silk. Rice is the principal food of the inhabitants.

Pekin is the capital of China; Shanghai and Canton are its chief commercial cities.

Japan.—Northeast of China is a group of islands, which together form the Empire of Japan.

Although the Japanese live so near the Chinese, they are a very different kind of people. They are more intelligent, and do not have so many odd notions. The Chinese dislike foreigners, and have learned very little from them; but the Japanese welcome Americans and Europeans, and make use of their inventions, such as railroads and telegraphs.

The chief productions of Japan are much the same as those of China.

Tokio is the capital of the Empire of Japan, and Yokohama [Yo-ko-háh-ma] is the chief commercial port.



SCENE IN CHINA.

[To be Recited.]

What is said of Asiatic Russia?

In the northern part the climate is very cold, and most of the inhabitants live chiefly on fish and the flesh of the reindeer.

What are the steppes of Asiatic Russia?

The steppes are immense grassy plains, inhabited by Tartars, who live in tents, and wander about with their flocks and herds.

What is the chief occupation of the Chinese? Agriculture.

What is the chief food of the Chinese? Rice.

What are the exports of China and Japan? Silk and tea.

Name the capital and the chief ports of China.

Pekin is the capital, and Shanghai and Canton are the chief ports.

Name the capital and the chief port of the Empire of Japan. Tokio is the capital, and Yokohama the chief port.

LESSON LX.

BRITISH INDIA AND INDO-CHINA.

[To be Read.]

British India.—British India includes nearly all of Hindostan, British Burmah, and the island of Ceylon [Ce-lone]. Hindostan has nearly as many inhabitants as there are in all Europe.

The greater part of the natives are called Hindoos; they are divided into five castes, or classes; and those who belong to any one of these castes must not even so much as eat with those who belong to another. The people of the highest caste, called Brahmins, are well educated; but those of the lowest caste are ignorant and degraded.

British India produces cotton, rice, sugar, opium, indigo, and spices in abundance. Bamboo, aloe, ebony, sandal-wood, palm, and other valuable trees abound in the forests. Here, too, the banyan-tree is found, whose great spreading branches send out shoots that grow downward until they reach the ground, where they take root, and send out branches themselves. Thus, at last, a single tree comes to appear like a little grove.

Calcutta, Bombay [Bom-báy], and Madras [Ma-dráhs] are the chief seaports.

Indo-China,—Indo-China consists of a number of small states, the most important of which are Burmah, Anam, and Siam. A large part of the inhabitants of Bankok [Ban-kók], the capital of Siam, live on bamboo rafts, placed in rows on the river on which the city is situated, so that they form long floating streets.

Terrible storms, called cyclones, sometimes take place in the Bay of Bengal [Ben-gáwl] and the China Sea, on which these countries border. The wind blows with fury round

and round in a circle, and moves forward at the same time. Vessels are lifted out of the ocean and carried into the fields and towns. The houses and trees are buried under the raging flood, and the inhabitants and animals are drowned. A cyclone among the islands in the Bay of Bengal, in 1876, destroyed nearly two hundred and fifty thousand people.

The chief commercial ports of Indo-China are Bankok and Singapore. Its productions and exports are the same as those of British India.

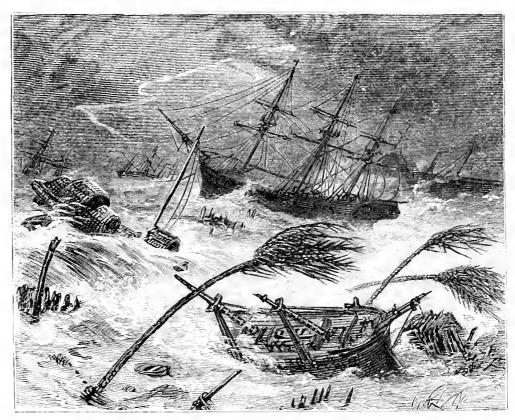
Persia.—A long time ago, Persia was a very powerful nation, and conquered all the countries

Arabia. — This country is interesting, because it contains the city of Mecca, the birth-place of Mohammed, the author of the religion called Mohammedanism. Mecca is held by the Mohammedans to be a holy city, and vast numbers of them visit it every year.

Mocha, a seaport of Arabia, on the Red Sea, is noted for a very choice kind of coffee.

Turkey.—The region now called Turkey in Asia has had a remarkable history. Thousands of years ago, there were mighty empires within its limits, whose capital cities—Babylon and Nineveh—were so vast and magnificent as to be ranked among the wonders of the world. Now nothing is left of them except a few ruins.

At the present time, it is a miserably oppressed country. Only two or three of its ancient places remain; one is Damascus, a very beautiful city, said to be the oldest city in the world; another is Bagdad. These cities get their support from caravans which carry goods from Persia to Smyrna, the prin-



A CYCLONE.

cipal seaport of the country, and to Constantinople, the capital of the Turkish Empire.

But this country is still more interesting because Palestine is a part of it, where the city of Jerusalem is, and where most of the events occurred that are described in the Bible.

The chief exports of Turkey are figs and other dried fruits.

[To be Recited.]

What countries does British India include?

It includes Hindostan, British Burmah, and the island of Ceylon.

What are its staple products?

Cotton, rice, sugar, opium, and spices.

Name the chief commercial ports of Indo-China.

Bankok and Singapore.

What is said of Mocha?

Mocha, a seaport of Arabia, on the Red Sea, is noted for a very choice kind of coffee.

What ancient cities of Turkey still remain?

Damascus and Bagdad.

AUSTRALIA.

(See Map on page 96.)

LESSON LXI. QUESTIONS ON THE MAP.

[To be Recited.]

What continent is southeast of Asia? What oceans are south and west of Australia? What ocean is east? What

large island is south of Australia? What group of islands is southeast? What large island is north of Australia? What four large islands are between Australia and Asia? What group of islands is northeast of Borneo? What is the capital and chief port of the Philippine Islands? What is the principal river of Australia? What is its chief branch? Name the three eastern divisions of Australia. What is the central division? What is the western division? What is the capital and chief city of Victoria? What is the capital and chief city of New South Wales?

LESSON LXII. AUSTRALIA, OCEANICA, ETC.

[To be Read.]

Australia.—This island continent, owned by Great Britain, was first used as a place to which England sent her criminals, instead of keeping them in prisons at home. But a great many of them gave up their bad habits when they reached Australia, and became industrious farmers and merchants. Large numbers of respectable people also went and settled there. So flocks and herds increased in the pastures; towns and cities were built; and now Australia is the chief wool-growing country in the world, and produces more gold than any other country except the United States. It also yields large quantities of cotton and wheat.

Most of its settlements are in the eastern part, in the provinces of New South Wales and Victoria. The chief cities are Melbourne and Sydney. A large part of the continent has not yet been explored.

There are no very large native animals in Australia, but there are varieties of "pouched" animals; that is, creatures which have pouches attached to their bodies, in which

they hold and protect their young when they are small. The kangaroo is the largest animal of this description.

Then there is a small creature with a body like a rat, but with webbed feet and a bill like a duck. It is called the duckbill. There is a bird whose tail-feathers grow in the form of a lyre or harp. It is named the lyre-bird. Here, too, are found the beautiful bird of paradise, the cassowary, which is a large bird like the ostrich, and the cockatoo, a very handsome kind of parrot.

Tasmania and New Zealand, large islands near Australia, belong to Great Britain. Their products are much like those of Australia.

Oceanica.—There are thousands of islands in the South Pacific Ocean. Some are large and have many inhabitants; but a great many are small rocky points, rising out of the ocean in parallel rows, and, no doubt, are the tops of lofty mountains. Many others are beautiful green atolls, or circular coral islands. Hundreds of these atolls are often found very near each other, dotting the blue waters, and forming one of the loveliest pictures to be seen in the world.

The islands of the Pacific, taken together, are called Oceanica. Each group also has a separate name.

Malaysia.—The islands near the peninsula of Indo-China are called Malaysia, because they are inhabited by a peculiar race of men, called Malays. These islands and the main-land near them are the "East Indies," which Columbus hoped to reach by a shorter route when he set sail on his first voyage of discovery.

They are extremely fertile, and yield in abundance spices, coffee, rice, tobacco, sugar, Manila grass, and other products of the hot regions. Borneo and Banca also have mines of excellent tin.

Java, Celebes, and a part of Borneo and Sumatra belong to the Netherlands. The Philippine Islands belong to Spain.

Melanesia means "islands of the blacks," and is the name given to the islands north and east of Australia, the largest of which is New Guinea.

Polynesia is a word meaning "many islands," and includes all the groups of small islands scattered over the Pacific Ocean. The only one of these groups which it is important to mention is the

Sandwich Islands. (See map of the Western Hemisphere.) These are of consequence because they are a convenient stopping-place for whale-ships when on their way to or from the Arctic Ocean. The steamers that run between San Francisco and Australia also call at these islands. The chief exports are cotton and sugar.

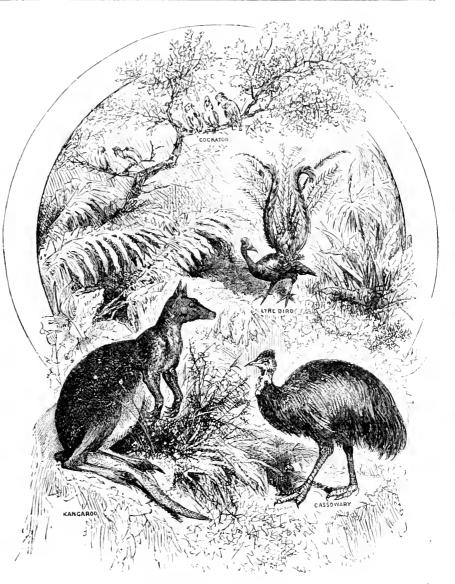
[To be Recited.]

To what country does Australia belong? It belongs to Great Britain.

What are its chief productions?
Wool, gold, cotton, and wheat.

Name some of the animals of Australia.

The kangaroo, the duckbill, the bird of par-



adise, the lyre-bird, the cassowary, and the cockatoo.

What does Oceanica include?

It includes all the islands of the Pacific Ocean.

What does Malaysia include?

It includes the islands near the peninsula of Indo-China.

What are the exports of the Malaysian islands?

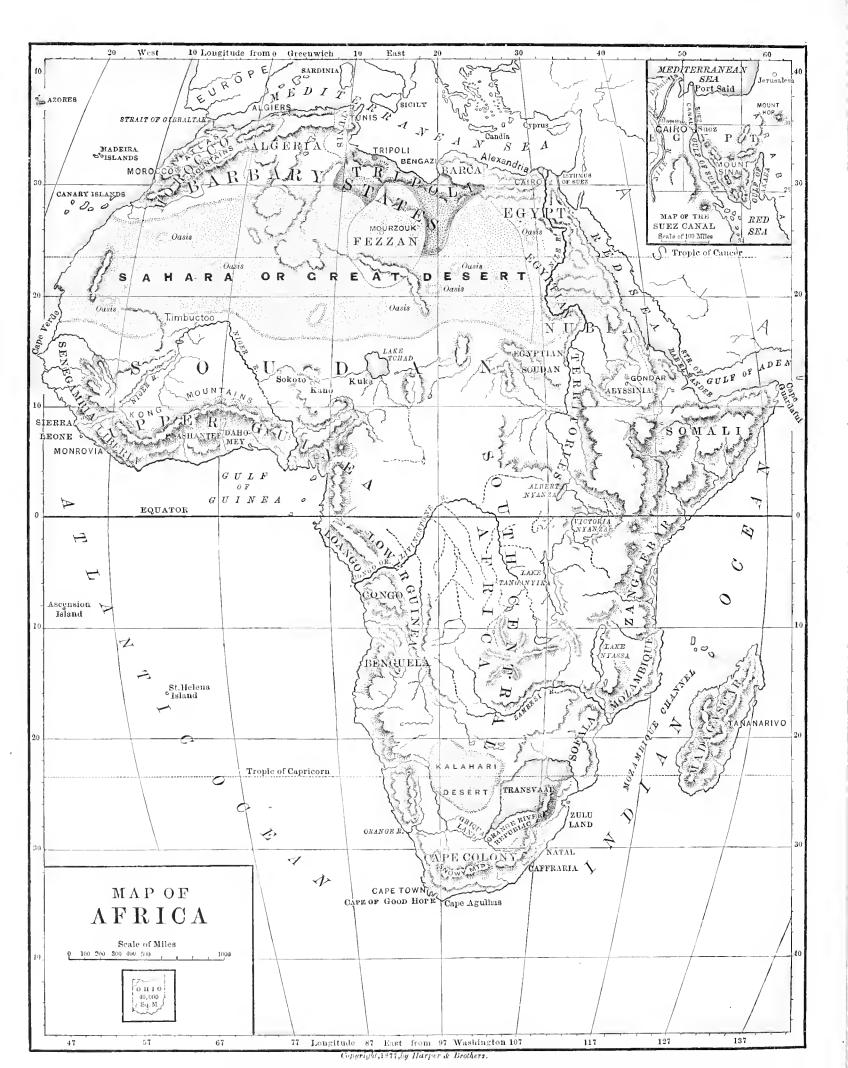
Tin, spices, coffee, rice, tobacco, and Manila grass.

What does Polynesia include?

It includes the groups of small islands scattered over the Pacific Ocean.

Why are the Sandwich Islands important?

They are important as a stopping-place for steamers and whale-ships.



AFRICA.

LESSON LXIII. QUESTIONS ON THE MAP.

[To be Recited.]

What continent is north of Africa? What one is northeast? What sea is on the north of Africa? What ocean is on the west? What ocean is on the east? What strait is between Africa and Europe? What ocean and sea does it connect? What isthmus connects Africa and Asia? Between what two seas is it? What gulf is southeast of the Red Sea? What strait connects them? What large island is on the east coast of Africa? What noted cape is near the southern extremity of Africa? What gulf is west of Africa?

What mountains are in the northern part of Africa? What mountains are in the western part of Africa? What desert is in the northern part of Africa?

What lake is near the centre of Africa? What lake is crossed by the equator? What river flows into the Mediterranean Sca? What river flows into the Indian Ocean? What two rivers flow into the Atlantic Ocean? What river flows into the Gulf of Guinea [Ghin'-e]?

What general name is given to the northwestern part of Africa? Which are the Barbary States? What is the capital of Morocco? Of Algeria? Of Tunis? Of Tripoli? Of Barca? What country occupies the northeastern part of Africa? What is its capital? What seaport is northwest of Cairo [Ki'-ro]? What country is south of Egypt? What is its capital? What colony is in the most southern part of Africa? What is its capital? What country is south of Sahara? What city in Soudan is on Niger River?

LESSON LXIV. SURFACE, ANIMALS, ETC.

[To be Read.]

There is not so much to be told about Africa as about the other continents; for, except in the northern part and in a few white settlements on the western and southern coasts, it is inhabited only by uncivilized negroes. A large portion is wholly unknown to white men.

Surface.—The surface of the interior is supposed to be quite level. The chief mountains are the Atlas Mountains in the north, the Kong Mountains in the west, and the ranges near the eastern border. One peak of the latter is nearly four miles high.

There are only five large rivers. These are the Nile, the Niger, the Congo, the Zambesi [Zam-bay'-zee], and the Orange.

The most remarkable portion of the surface is the great Desert of Sahara, the largest desert in the world. It occupies nearly a quarter of the whole continent. The greater part is covered with dry, shifting sands, which, made scorching hot by the sun, are sometimes lifted up by storm winds, and driven along in thick clouds so as to be fatal to travellers. Whole caravans are sometimes stifled by these sand-clouds. Here and there on the vast surface of the desert are fertile spots that are called oases. They are watered by underground springs, and covered with trees. Their wells supply travellers with water, and their trees afford them pleasant shade. Commerce is carried on across this immense desert by means of caravans.

Animals.—Africa produces a great variety of native animals, some of them being of enormous size. Besides the elephant, the rhinoceros, the lion, and the crocodile, which are found in Asia also, there is the hippopotamus, a huge creature that lives partly on land and partly in the water; the giraffe, a singular animal with short hind legs, very long fore legs, and a very long neck; the chimpanzee, a species of monkey as large as a man; the zebra, a kind of striped horse;

and the hyena, a fierce creature that lives on decaying flesh.

Egypt.—The most interesting and important of all the countries of Africa is Egypt. Thousands of years ago, there was a powerful nation in Egypt that had great learning and skill. It built magnificent temples, of which there are many ruins. It also built the immense piles of stone called the Pyramids. Only a few of that ancient peo-

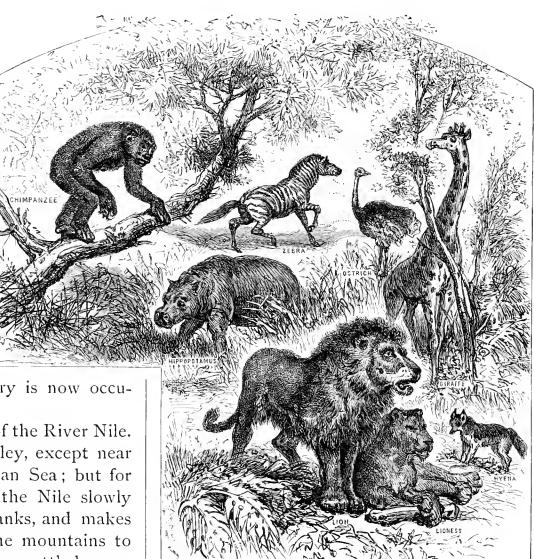
ple still remain. The country is now occupied by Arabs and Turks.

Egypt occupies the valley of the River Nile. No rain ever falls in this valley, except near the coast of the Mediterranean Sea; but for three months of every year the Nile slowly rises, until it overflows its banks, and makes the valley like a lake from the mountains to the sea. When the water has settled away from the valley again, the people plant their fields: they become green and beautiful, and produce abundantly. The chief products are cotton, rice, and wheat.

Cairo [Kí-ro] is the capital. Alexandria, on the Mediterranean Sea, is the largest seaport.

Suez Canal, a large ship-canal, ninety-two miles long, has been dug from the Mediterranean Sea across the isthmus of Suez to the Red Sea; and now the ships that used to carry goods around the Cape of Good Hope go by way of this canal, which is a much shorter and safer route.

Barbary States.—The other countries that lie along the border of the Mediterranean Sea are called the "Barbary States." Their exports are grain, dates, cotton, Morocco leather, and articles brought from the inte-



rior of the continent by the caravans, such as ivory, ostrich feathers, and gold-dust.

Soudan.—Soudan is the name of a large region south of the Great Desert, and is inhabited by negroes.

Coast Settlements.—Liberia, on the west coast, is settled by negroes from the United States. Cape Colony, Natal, and Transvaal, in the southern part, are British colonies. Senegambia, on the west coast, belongs to France; and Sierra Leone is a British colony for negroes rescued from slave-ships.

Islands.—Of the islands belonging to Africa the largest is Madagascar. Its inhabitants are partly civilized. West of Morocco are two groups of small islands, called the Madeira and Canary Islands. Their chief products are wine, sugar, and coffee.

[To be Recited.]

What mountains are there in Africa?

The Atlas Mountains, the Kong Mountains, and the ranges near the eastern border.

Name the five largest rivers.

The Nile, the Niger, the Congo, the Zambesi, and the Orange.

What is said of the Desert of Sahara?

It is the largest desert in the world.

Name some of the animals of Africa.

The elephant, the rhinoceros, the lion, the crocodile, the hippopotamus, the giraffe, the zebra, the chimpanzee, and the hyena.

LESSON LXV. QUESTIONS FOR REVIEW.

[To be Recited.]

For what is Asia remarkable? Describe its surface. Its climate. Name some of the animals of Asia.

What is said of Asiatic Russia? What is said of the Chinese? What is their principal occupation? Name the chief productions of China. Name the most important cities.

Of what does the Empire of Japan consist? What is said of the Japanese? What are the productions of Japan?

What does British India include? What is said of Hindostan? What are the productions of British India? Name the chief seaports. What is said of Bankok? What are cyclones? What is said of Persia? For what is Mecca noted? For what is Mocha noted? What is said of Turkey?

To what country does Australia belong? Name the chief productions of Australia. Name the two chief cities. Name some of the animals of Australia.

What does Oceanica include? Into what three groups are these islands divided? What does Malaysia include? Melanesia? Polynesia? Name the productions of the Malaysian islands. Which is the largest of the Melanesian islands? Which is the most important group in Polynesia?

By whom is Africa inhabited? Describe the surface of Africa. Name the five largest rivers of Africa. What is said of the Desert of Sahara? How is commerce carried on across the desert? Name some of the animals of Africa. What is the chief river of Egypt? Of what use is it? Name the chief products of Egypt. Name the capital and the largest scaport. Where is the Suez Canal? Of what use is it? Name the Barbary States. Name their principal exports. What is Soudan? Name the coast settlements. Name the most important islands that belong to Africa.

TROPICS AND POLAR CIRCLES.

LESSON LXVI.

[To be Read.]

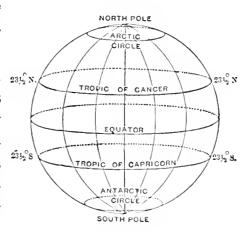
We have learned that the earth is divided into five belts or zones: one Torrid, two Temperate, and two Frigid Zones.

The circles that bound the Torrid Zone on each side of the equator are drawn just at the limit of the space on which the sun's rays fall vertically. These two circles are called *tropics*. The northern tropic is the Tropic of *Cancer*; the southern, the Tropic of *Capricorn*.

Since the boundaries of the Torrid Zone are called tropics, the productions of that zone are called *tropical*. Thus, oranges, bananas, and pine-apples are *tropical* fruits.

The circles that separate the Frigid from the Temperate Zones are called polar circles. They are drawn at the limit of the succession of day and night. The northern polar circle is called the Arctic Circle; the southern is called the Antarctic Circle. Within these cir-

cles, the *longest*day in the year
is not 15 hours,
as it is with us, 23½°x.
but is 24 hours
just on the inner
edge of the circles, and becomes
longer and longer as we come
nearer the poles,



where there are no less than six months of constant sunshine, followed by six months during which the sun never rises.

LATITUDE AND LONGITUDE.

LESSON LXVII.

[To be Read.]

One of the most important things man has ever invented is the method of finding the exact position of any place on the surface of the earth; for without this knowledge no correct maps could be made, and seamen could not take their ships in safety across the ocean.

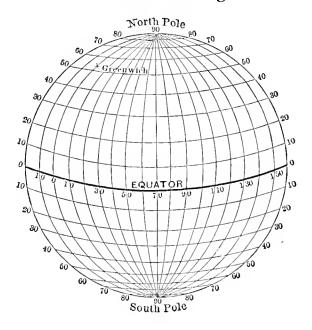
Let us suppose that a map of a hemisphere was to be made. The first step was to draw the circles that were to be the boundaries of the map; then to fix upon some circles to start from in making the necessary measurements and reckonings. For if there is any way to find out how far a place is north or south from a given circle, and also how far it is east or west from a given circle, one can tell its exact position on the earth's surface.

The equator was selected as the circle from which to reckon distance north or south, and circles were drawn parallel to the equator, and between it and the poles. These circles are called *parallels of latitude*. The distance of a place north or south of the equator is its *latitude*.

The next step was to select a place from which to reckon distance east or west. For this purpose a semicircle was drawn at right angles to the equator, through Greenwich [Grin-ij], near London, England. This semicircle is called the *meridian* of Greenwich, or the *prime meridian*. The distance of a place east or west of the *prime meridian* is its *longitude*. The point where this meridian crosses the equator was made the starting-point of the reckoning. Then the equator was divided into 360 degrees, and other semicircles were

drawn at right angles to the equator. These semicircles are called *meridians*.

We can easily see that every place has its own meridian and its own parallel of latitude; so there may be as many meridians and parallels of latitude as can be drawn side by side over the whole surface of the globe.



Places on the equator have no latitude. The latitude of places increases as we approach the poles, at which points it is 90 degrees, the greatest possible latitude.

Places on the prime meridian have no longitude. The greatest longitude a place can have is 180 degrees.

The degrees of latitude are of nearly uniform length; but the degrees of longitude decrease in length from the equator towards the poles, and at the poles have no length, since the meridians there cross each other.

Now, with an instrument called a *sextant*, the exact position of any place on the globe can be ascertained, and, by means of the parallels and meridians, it can be marked on a map.

RACES OF MEN.

LESSON LXVIII.

[To be Read.]

The inhabitants of the earth differ from each other in their general appearance—in the shape of the head, color of the skin, and

in other particulars—and for this reason they have been divided into classes.

These classes are five in number, and are called the "Five Races of Men:" 1. The White, or Caucasian, race; 2. The Yellow, or Mongolian, race; 3. The Black, or Negro, race; 4. The Brown, or Malay, race; 5. The Red, or Indian, race.

The White, or Caucasian, race is the most numerous of all. The white people in America and Europe, and the Persians, Arabians, Jews, and Hindoos in Asia, belong to it. It is known chiefly by a fair skin and regular features.

The Yellow, or Mongolian, race ranks next to the Caucasian race in numbers. The people of this race have a yellowish skin, straight black hair, broad, flat faces, and almond-shaped eyes. The Esquimaux, the Turks, the Tartars, the Chinese, and the Japanese belong to this race.

The Black, or Negro, race has a very dark skin, thick lips, flat noses, and woolly hair, and is found chiefly in Africa.

The Brown, or Malay, race is found in the Malay Peninsula, in the southern part of Asia, in the neighboring islands, and in the groups of islands in the Pacific Ocean. The Malays have brown skins, flat faces, large mouths, and coarse black hair.

The Red, or Indian, race consists of the descendants of those who inhabited North America and South America when those continents were settled by white men. They have reddish skins, straight and coarse black hair, and high cheek-bones.



LESSON LXIX.

[To be Recited.]

What are the boundaries of the Torrid Zone called? Where are they drawn? Name the tropics. What circles separate the Temperate and Frigid Zones? Where are they drawn? Name the polar circles.

What is latitude? How is it reckoned? What are parallels of latitude? What is the latitude of a place on the equator? What is the greatest latitude a place can have?

What is longitude? What is the prime meridian? What is a meridian? What is the longitude of a place on the prime meridian? What is the greatest longitude a place can have?

Into how many races have the inhabitants of the earth been divided? Name them. Describe each of the races.

QUESTIONS FOR GENERAL REVIEW.

I. INTRODUCTION.

What is geography? What is the form of the earth? Why does it seem to be a plain? What proofs can you give that it is a ball, and not a plain? What is a hemisphere? How many hemispheres are there? What are the divisions of the land? What are the forms of the land? How many continents are there? Name them. What are the divisions of the water? What are the forms of the water? How many oceans are there? Name them. Which is the most important? Describe the formation of a coral island. Describe the course of a drop of water from the time it leaves the ocean until it returns to the ocean again. How are day and night caused? How are the seasons caused? How many zones are there? Name them. What causes the difference in the temperature—that is, the heat or cold—of the different zones? What is the earth's axis? What are the poles? Which are the cardinal points? What is the distance around the earth? Describe the Gulf Stream.

II. NORTH AMERICA.

What strait separates North America from Asia? What isthmus connects North America and South America? Name the chief mountain systems of North America. Name five of the chief rivers. Name the "Great Lakes." Name the chief islands. Name the four largest of the West India Islands. What is said of the rivers of North America? Of its soil? Of its productions? Name some of its animals.

Name the countries of North America. Where is the United States? What is its capital? Name the capitals of the North Atlantic States. The Middle Atlantic States. The South Atlantic States. The South Central States. The North Central States. The West Central States. The States of the Plains. The Western or Highland States. In going from Cincinnati to New Orleans by water, what rivers would we sail upon? What states would we pass? In going from Chicago to Buffalo by boat, what bodies of water would we sail upon? What states and countries would we pass? In going from Portland to New Orleans by water, what states would we pass? What continent would we reach in sailing directly east from New York? In sailing directly west from San Francisco?

Name the divisions of British America. In what valley is most of the population of the Dominion of Canada? What is its capital? What two important cities on St. Lawrence River? Where is Mexico? What is its capital? What is its climate?

III. SOUTH AMERICA.

Describe the Andes Mountains. Where are the capitals of the Andes countries? How does the climate of the Andes plateau differ from that of the plains below the mountains? Name the three great rivers of South America. Which of these is the largest river in the world. What are the llanos? The selvas? The pampas? What large empire in South

America? Where is it situated? Name the countries of South America which border on the Atlantic Ocean. Name those on the Pacific Ocean. What countries are crossed by the Equator? What nations conquered South America? What are the chief products of South America? Name some of the animals of South America.

IV. EUROPE.

Name the inland seas of Europe. Name five of its most important rivers. Is the kingdom of Great Britain on the main-land, or on islands? With what state of the United States do these islands compare in size? What part of North America is in the latitude of the British Isles? What is its climate? What is the climate of the British Isles? What makes them so much warmer than Labrador? What climate have the countries bordering on the Mediterranean Sea? What causes this climate? What ocean is north of Europe? What continent east? What sea south? What ocean west? Name the five great powers of Europe. What is the capital of Great Britain? Of France? Of the German Empire? Of Austria? Of Russia? Name the countries of Europe that are situated on peninsulas. Which is the largest country of Europe? What countries border on the Baltic Sea? On the North Sea? On the Atlantic Ocean? On the Mediterranean Sea? What countries have little or no sea-coast? What celebrated mountains in Europe? Name some of the animals of Europe. A ship is to carry wheat from Odessa to London, what course will it take?

V. ASIA AND AUSTRALIA.

Where are the chief mountains of Asia? Which are the highest mountains in the world? Name some of the animals of Asia. What populous empire is situated wholly on islands? Where are those islands? What ocean north of Asia? What ocean east? What ocean south? What land and seas form its western boundary? What is the chief article of food among the crowded inhabitants of China and Southern India? What islands are crossed by the Equator? To what country does Australia belong? What are its chief products? Name some of its animals. What large islands in its neighborhood belong to Great Britain? What is Malaysia? Melanesia? Polynesia? How do most ships go from Europe to the East Indies?

VI. AFRICA.

By whom is most of Africa inhabited? Describe its surface. How is traffic carried on across the Desert of Sahara? What are oases? Name the chief rivers of Africa. Into what do they flow? Name the principal animals of Africa. What is the most important country of Africa? How is the soil of Egypt made fertile? Does it ever rain in Egypt? What are the chief products of Egypt? What important canal belongs to Africa? Why is it important? What countries in Africa border on the Mediterranean Sea? What is south of those countries? What large island in the Indian Ocean belongs to Africa?

TABLES OF POPULATION.

[PRINCIPAL CITIES OF THE WORLD.]

* Census of 1875.

** Census of 1870.

London, England	3,533,484	Hyderabad, Hindostan 400,000	Warsaw, Russia 251,584	Munich, Germany 169,693
Paris, France		Ningpo, China 400,000	Rome, Italy	Florence, Italy 167,093
Pekin, China		Madras, Hindostan 395,000	Breslau, Germany 239,050	Manila, Malay Islands 165,000
*New York, U. S		Birmingham, England 377,436	Bucharest, Roumania 221,150	Odessa, Russia 162,814
Vienna, Austria		Brussels, Belgium 376,965	Palermo, 1taly 219,938	Lille, France 162,775
Canton, China		Kioto, Japan 375,000	Edinburgh, Scotland 218,729	Lima, Peru 160,000
Berlin, Germany		Cairo, Egypt 349,SS3	**Cincinnati, U. S 216,239	Stockholm, Sweden 157,215
Tientsin, China		Hamburg, Germany 345,801	Bordeaux, France 215,140	Delhi, Hindostan 152,000
*Philadelphia, U. S		Lyons, France 342,815	Alexandria, Egypt 212,054	Bokhara, Asiatic Russia 150,000
Han Chau, China	' 1	*Boston, U. S	Turin, Italy 207,770	Singapore, Indo-China 150,000
Tokio, Japan	790,000	Madrid, Spain 332,024	Havana, West Indies 206,000	Smyrna, Asiatic Turkey 150,000
St. Petersburg, Russia		Marseilles, France 318,868	Pesth, Austria 202,000	**San Francisco, U. S 149,473
Bombay, Hindostan	1	Dublin, Ireland 314,666	Amoy, China 200,000	Santiago, Chili 148,264
Calcutta, "		**St. Louis, U. S 310,864	Benares, Hindostan 200,000	Antwerp, Belgium 145,101
Moscow, Russia	611,970	**Chicago, " 298,977	Mexico, Mexico 200,000	Newcastle, England 139,929
Fuh Chau, China	600,000	Leeds, England 291,580	Bristol, Eugland 199,539	Hull, England 136,933
Glasgow, Scotland	555,933	Amsterdam, Netherlands 289,982	Dresden, Germany 197,295	Cologne, Germany 135,371
Liverpool, England	527,033	Lucknow, Hindostan 285,000	Melbourne, Australia 194,000	Sydney, Australia 135,000
Manchester, "	500,397	Patna, " 284,000	**New Orleans, U. S 191,418	*Buffalo, U. S 134,573
Bankok, Indo-China	500,000	Shanghai, China 277,000	Prague, Austria 189,949	Rotterdam, Netherlands 132,054
Nankin, China	500,000	Lisbon, Portugal 275,286	Copenhagen, Denmark 181,291	Toulouse, France 131,642
*Brooklyn, U.S	484,616	Rio Janeiro, Brazil 274,972	Barcelona, Spain 180,000	Genoa, Italy
Naples, Italy	448,743	Sheffield, England 274,914	Buenos Ayres, Arg. Con 178,000	Ghent, Belgium 130,092
Ozaka, Japan	414,000	**Baltimore, U. S 267,354	Belfast, Ireland 174,394	Bahia, Brazil 129,109
Constantinople, Turkey	400,000	Milan, Italy 261,976	Bradford, England 173,723	Venice, Italy

Constantinople, Turkey 400,000	Milan, Italy 261,976	Bradford, England 173,723	Venice, Italy		
[CITIES AND TOWNS OF THE UNITED STATES HAVING A POPULATION OF MORE THAN 12,000 IN 1870.]					
Adams, Mass 12,090	Detroit, Mich 79,577	Milwaukee, Wis 71,440	Richmond, Va 51,038		
Albany, N. Y 69,422	Dubuque, Iowa 18,434	Minneapolis, Minn 13,066	Rochester, N. Y 62,386		
Alexandria, Va 13,570	Elizabeth, N. J 20,832	Mobile, Ala 32,034	Sacramento, Cal 16,283		
Allegheny, Pa 53,180	Elmira, N. Y 15,863	Nashville, Tenn 25,865	Salem, Mass 24,117		
Allentown, Pa	Erie, Pa	Newark, N. J 105,059	Salt Lake City, Utah 12,854		
Atlanta, Ga	Evansville, Ind 21,830	New Albany, Ind 15,396	San Antonio, Texas 12,256		
Auburn, N. Y 17,225	Fall River, Mass 26,766	New Bedford, Mass 21,320	Sandusky, O 13,000		
Augusta, Ga 15,389	Fond du Lac, Wis 12,764	New Brunswick, N. J 15,058	San Francisco, Cal 149,473		
Baltimore, Md 267,354	Fort Wayne, Ind 17,718	Newburgh, N.Y 17,014	Savannah, Ga 28,233		
Bangor, Me	Galveston, Texas 13,818	Newburyport, Mass 12,595	Scranton, Pa 35,092		
Binghamton, N. Y 12,692	Gloucester, Mass 15,389	New Haven, Ct 50,840	Somerville, Mass 14,685		
Bloomington, Ill 14,590	Grand Rapids, Mich 16,507	New Orleans, La 191,418	Springfield, Mass 26,703		
Boston, Mass 250,526	Harrisburg, Pa 23,104	Newport, Ky 15,087	Springfield, Ill		
Bridgeport, Ct	Hartford, Ct 37,180	Newport, R. I 12,521	Springfield, O 12,652		
Brooklyn, N. Y 396,099	Haverhill, Mass 13,092	Newton, Mass 12,825	St. Joseph, Mo 19,565		
Buffalo, N. Y 117,714	Hoboken, N. J 20,297	New York, N. Y 942,292	St. Louis, Mo		
Burlington, Iowa 14,930	Indianapolis, Ind 48,244	Norfolk, Va	St. Paul, Minn 20,030		
Burlington, Vt 14,387	Jersey City, N. J 82,546	Norwalk, Ct 12,119	Syracuse, N. Y 43,051		
Cambridge, Mass 39,634	Kansas City, Mo 32,260	Norwich, Ct	Taunton, Mass 18,269		
Camden, N. J 20,045	Keokuk, Iowa 12,766	Omaha, Neb 16,083	Terre Haute, Ind 16,103		
Charleston, S. C 48,956	La Fayette, Ind 13,506	Oshkosh, Wis	Toledo, O		
Charlestown, Mass 28,323	Lancaster, Pa 20,233	Oswego, N. Y 20,910	Trenton, N. J		
Chelsea, Mass	Lawrence, Mass 28,921	Paterson, N. J	Troy, N. Y 46,465		
Chicago, 1il 298,977	Leavenworth, Kansas 17,873	Peoria, Ill 22,849	Utica, N. Y 28,804		
Cincinnati, O 216,239	Lewiston, Me 13,600	Petersburg, Va 18,950	Vicksburg, Miss 12,443		
Cleveland, O	Lexington, Ky 14,801	Philadelphia, Pa 674,022	Washington, D. C 109,199		
Cohoes, N. Y	Little Rock, Ark 12,380	Pittsburgh, Pa 86,076	Waterbury, Ct		
Columbus, O	Lockport, N. Y 12,426	Pottsville, Pa 12,384	Wheeling, W. Va 19,280		
Concord, N. H	Louisville, Ky 100,753	Portland, Me 31.413	Williamsport, Pa 16,030		
Covington, Ky 24.505		Poughkeepsie, N. Y 20,080	Wilmington, Del 30,841		
Davenport, Iowa 20,038	Lynn, Mass 28,233	Providence, R. I 68,904	Wilmington, N. C 13,446		
Dayton, O	Manchester, N. H 23,536	Quincy, Ill 24,052	Worcester, Mass 41,105		
Des Moines, Iowa 12,035	Memphis, Tenn 40,226	Reading, Pa 33,930	Yonkers, N. Y 12,733		

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AsuncionAh soon se own'. Bab el Mandeb. Bab el Man' deb. Bagdad.....Bag dad'. Bahama.....Ba ha' ma. Bahia.....Bah ee' a. Baltic.....Bawl' tic.

Baltimore......Bawl' te more. Bangor Bang' gor. Bankok Ban kok'. Baton Rouge...Bah tn Roozh'. Behring..... Beer' ing. BeirutBi' root.

Abyssinia Ab is sin' e a.

Adriatic A dre at' ic. Afghanistan Af gan is tan'.

AlabamaAl a bah' ma.

AlbemarleAl be marle'.

Alleghany.....Al' le gay ny.

Altamaha.....Al ta ma haw'.

Androscoggin ... An dros cog' gin.

Appalachian Ap pa la' che an. Appalachicola...Ap pa lach e co la. Arequipa......Ah ray kee' pa.

Argentine.....Ar' gen tine. Arizona.....Ar i zo' na.

ArkansasAr kan' sas. AsiaA' she a.

AltaiAl ti'.

Amoor......A moor'.

Alexandria.....Al ex an' dre a. Algiers......Al jeerz'.

Belgrade......Bel grade Beloochistan Be loo chis tan'. Bengal.....Ben gawl'. Bengazi.....Ben gah' ze. Berlin Ber lin'. Bogota Bo go tah'.

Boise City Bwah zay' Cit' y. -BokharaBok hah' ra. BombayBom bay'. Bosporus......Bos' po rus. Brahmapootra...Brah ma poo' tra. —

Brazil......Bra zeel'. Brazos.....Braz' os. Breslau.....Bres law. Brussels Brus' slz. Bucharest.....Boo ka rest'. Buenos Ayres...Bo' nos Air' ez.

Cabul......Cah bool'. Cairo (Egypt)...Ki' ro. Callao......Cal lah' o. Canton (China)..Can ton'. Caracas.......Ca rak' as. Caribbean.....Car ib bee' an.

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Colorado Colorado Colorado Colorado......Col o rah' do. Constantinople...Con stan te no' pl. Copenhagen....Co pen ha' gen. Cotopaxi.....Co to pax' e. CovingtonCuv' ing ton. CuzcoCooz' co.

Dakota......Dah koʻ ta. Darien......Day' re en Davenport.....Day' en port. Des Moines.... De Moin'. Detroit De troit'.

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Lassa.... Lev' en worth.

Lima Lee' ma.

Louisiana... Loo ee ze ah' na.

Louisville... Loo' is vil.

Lyons ... Li' onz. Madeira Ma dee' ra.

Madras......Ma drahs'. Madrid Ma dreed . Magdalena . . . Mag da lee' na. . . Mag da lee' na. Magellan....Ma gel' lan. Malabar....Mal a bar'. Malacca Ma lae ca.
Malay Ma lay'.
Malaysia Ma lay' she a.
Manitoba Man e to bah'. Manila Ma nil' a. Maranham Mar an ham'. Marseilles Mar sailz'. Matagorda Mat a gor' da. Manmee Maw mee'.
Melanesia..... Mel a nee' she a.

Melbourne.....Mel' burn.

Miami.........Mi am e'.

Merrimac..... Mer' re mac.

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SabineSa been'. Sacramento.....Sac ra men' to. SaginawSag' e naw. Sahara.Sah hah' ra. Saigon......Si gon'.
Sandusky.....San dus' ky.
San Joaquin...San Ho a keen'. ₹Υ.

San Jose San Ho say'. Santa Fé San' ta Fay. Santee San tee' Santiago......San ti ah' go. Schenectady Ske nec' ta dy. SciotoSi o' to. SchuylkillSkool' kill. Seine.....Sane. Shanghai Shang hi'. SiamSi am Sicily.....Sis' e le. Sierra Leone... { See er' ra Lee-o' nee. Sierra Madre ... { See er' ra Mah'-dray. Singapore.....Sing ga pore'. Soudan Soo dan'.
Staten Island ... Stat' n 1' land.
St. Anthony Saint An' to ny. St. Augustine ... Saint Awgus teen'. St. Croix Saint Croi'. St. Louis Saint Loo' is. St. Roque Saint Roke'. Sucre.....Soo' cray. SuezSoo ez Sumatra Su mah' tra. SydneySid' ne. SyracuseSyr' a cuse. Tabriz.....Ta breez'.
Tahlequah....Tah' le kwah.
Tashkend....Tash kend'. Tasmania.....Taz may' ne a. Taunton.....Tahn' ton. Tchad Chad. Teheran Tee he rahn'. Tennessee Ten nes see'. Terre Haute Ter' re Hote. Thames Temz. ThibetTe bet'.
Tierra del Fuego. { Tee er' ra del Fway' go. Fway' go. Tiflis......Tif' lis.
Timbuctoo....Tim buc too'.
Titicaca...Tit e cah' ca.
Tokio.....To' kee o.
Toleedo.....To lee' do.
Toneka....To pee' lea Topeka....To pee' ka. Trinidad.....Trin e dad'. Tripoli Trip' o le.
Tulare Too lah' re.
Turkestan Toor kes tan'. Uruguay Yoo roo gway'. Utah Yoo' tah. Utica Yoo' ti ca. Valparaiso Val pa ri' so. VenezuelaVen e zwee' la. Vera Cruz Vay' ra Kroos. Versailles......Ver sailz'. Vienna Ve en' na. Wabash Waw' bash. WahsatchWah satch'. Warsaw War' saw. Wilkesbarre Wilks' bar re. Willamette Wil lam' et. Winnebago Win ne ba' go. Winnipeg......Win' ne peg. Winnipiseogee .. Win ne pe sok' e. Winona We no' na. Woonsocket Woon sock' et. Worcester Woos' ter. Wyoming Wi o' ming. Yang tse Kiang . Yang tse Ki ang'. Yedo Yed' o. Yenisei Yen e say' e. Yokohama Yoko hah' ma.
Yosemite Yosem' e te.
Yucatan Yose a tan'. Yukon.....Yoo' kon.

ZambesiZam bay' zee.

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